500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

**ARUP Laboratories** 

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

Report Request ID: 16445757

23-Dec-22 13:42

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Printed:

Autoimmune Neurologic Disease   Reflex CSF	Received: 19-Dec-22 0	8:06	Report/Verified: 19-Dec-22 08:17
Procedure	Result	Units	Reference Interval
N-methyl-D-Aspartate Receptor Ab,CSF	1:80 * f1 i1		[< 1:1]
Paraneoplastic Abs (PCCA/ANNA)	ANNA Detected * f2 i	2	[None Detected]
AMPA Receptor Ab IgG Screen,CSF	Detected * t1 i3		[< 1:1]
GABA-B Receptor Ab IgG Screen, CSF			[< 1:1]
CASPR2 Ab IgG Screen by IFA,CSF	Detected * t3 i5		[< 1:1]
LGI1 Ab IgG Screen by IFA,CSF	Detected * t4 i6		[< 1:1]
CV2.1 Ab IgG Screen,CSF	Detected * t5 i7		[< 1:1]
SOX1 Antibody, IgG by Immunoblot CSF	, High Positive * <sup>i8</sup>		[Negative]
Amphiphysin Antibody,CSF	Positive * i9		[Negative]
DPPX Ab IgG CBA IFA Screen,CSF	Detected * t6 i10		[< 1:1]
GABA-AR Ab IgG CBA-IFA Screen, CSF	Detected * t7 i11		[< 1:1]
IgLON5 Ab IgG CBA-IFA Screen,CS	F Detected * t8 i12		[< 1:1]
ITPR1 Ab IgG CBA-IFA Screen,CSF	Detected * t9 i13		[< 1:1]
mGluR1 Ab IgG CBA-IFA Screen,CS			[< 1:1]
Voltage-Gated Potassium Channel Ab,CSF	5.0 H i15	pmol/L	[0.0-1.1]
Glutamic Acid Decarboxylase Antibody CSF	15.0 H i16	IU/mL	[0.0-5.0]
Neuronal Nuclear Abs IgG, IB, CSF   I	Received: 19-Dec-22 0	8:06	Report/Verified: 19-Dec-22 08:17
Procedure Neuronal Nuclear Ab (Hu) IgG,IB	Result , Positive * i17	Units	Reference Interval [Negative]
CSF Neuronal Nuclear Ab (Ri) IgG,IB	, Positive * <sup>i18</sup>		[Negative]
CSF Neuronal Nuclear Ab (Yo) IgG,IB	, High Positive * <sup>i19</sup>		[Negative]
CSF Neuronal Nuclear Ab (TR/DNER)	Positive * i20		[Negative]
IgG,CSF Neuronal Nuclear Antibody Titer,   N	Received: 19-Dec-22 0	8:06	Report/Verified: 19-Dec-22 08:17
IgG CSF Procedure	Result	Units	Reference Interval
Neuronal Nuclear Ab Titer,IgG CSF	1:40 * <sup>i21</sup>	Ullics	[< 1:1]
AMPA Receptor IgG Ab CSF, Titer	Received: 19-Dec-22 0	8:06	Report/Verified: 19-Dec-22 08:17
Procedure	Result	Units	Reference Interval
AMPA Receptor Ab IgG Titer,CSF	1:40 * i22		[< 1:1]
*=Abnormal, #=Corrected, C=Critical, f=Result Footn	ote, H-High, i-Test Information,	L-Low, t-Interpr	retive Text, @=Performing lab

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

Recorded	CASPR2 Ab Titer IgG by IFA, CSF Procedure CASPR2 Ab IgG Titer by IFA,C	Received: 19-Dec-2 Result SF 1:40 * <sup>i23</sup>	22 08:06 Units	Report/Verified: 19-Dec-22 08:17  Reference Interval  [ < 1:1]			
Procedure	CV2.1 Ab IgG Titer, CSF Procedure CV2.1 Antibody IgG Titer by	Received: 19-Dec-2		Reference Interval			
DPPX Ab IgG CBA IFA Titer,CSF	DPPX IgG Ab Titer, CSF	Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
Titer, CSF Procedure  Result Onits GABA-AR Ab IgG CBA-IFA Titer, CSF 1:80 * 126		Result					
GABA-AR Ab IgG CBA-IFA Titer, CSF 1:80 * 126 GABA-B Receptor IgG Ab CSF, Titer   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   C 1:1]  ITPRI Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   Reference Interval   C 1:1]  ITPRI Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   Reference Interval   C 1:1]  ITPRI Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   Reference Interval   C 1:1]  IGII Ab Iter IgG by IFA, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   Reference Interval   C 1:1]  INGINAL Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   Reference Interval   C 1:1]  INGINAL Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure Result Units   Reference Interval   C 1:1]  INGINAL Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17  Reference Interval   C 1:1]  Interpretive Text  Interpretive		Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
Procedure			Units				
GABA-B Receptor Ab IgG Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure   Result   Units   Reference Interval   [< 1:1]   ITPR1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17   ITPR1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17   Procedure   Result   Units   Reference Interval   [< 1:1]   ITPR1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17   Received: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)   AMPAR Antibody, IgG is detected. Titer results to follow.  13: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)   GABA-BR Antibody, IgG is detected. Titer results to follow.  13: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)   CASPR2 Antibody, IgG is detected. Titer results to follow.  14: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)   LGI1 Antibody, IgG is detected. Titer results to follow.  15: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.   Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)   DPPX Antibody, IgG is detected. Titer results to follow.	GABA-B Receptor IgG Ab CSF, Tite	er   Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
Procedure Result Units Reference Interval [< 1:1]  IgLON5 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval [< 1:1]  LGI1 Ab Titer IgG by IFA, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval [< 1:1]  LGI1 Ab Titer IgG by IFA, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval [< 1:1]  LGI1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval [< 1:1]  MGluR1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval [< 1:1]  Interpretive Text  1: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)  AMPAR Antibody, IgG is detected. Titer results to follow.  1: 19-Dec-22 08:01 (CABPA-B Receptor Ab IgG Screen, CSF)  GABA-BR Antibody, IgG is detected. Titer results to follow.  1: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)  CASPR2 Antibody, IgG is detected. Titer results to follow.  1: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)  LGI1 Antibody, IgG is detected. Titer results to follow.  2: 19-Dec-22 08:01 (CI21 Ab IgG Screen, CSF)  CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  2: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)  DPPX Antibody, IgG is detected. Titer results to follow.			Units				
ITPRI Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure   Result   Units   Reference Interval   [< 1:1]    IgLON5 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure   Result   Units   Reference Interval   [< 1:1]    IgION5 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure   Result   Units   Reference Interval   [< 1:1]    IngluR1 Ab IgG Titer by IFA, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17 Procedure   Result   Units   Reference Interval   [< 1:1]    Interpretive Text   19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)   AMPAR Antibody, IgG is detected. Titer results to follow.    Interpretive Text   19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF)   GABA-BR Antibody, IgG is detected. Titer results to follow.    Interpretive Text   19-Dec-22 08:01 (GASPR2 Ab IgG Screen by IFA, CSF)   CASPR2 Antibody, IgG is detected. Titer results to follow.    Interpretive Text   19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)   CASPR2 Antibody, IgG is detected. Titer results to follow.    Interpretive Text   19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)   CASPR2 Antibody, IgG is detected. Titer results to follow.    Interpretive Text   19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow.    Interpretive Text   19-Dec-22 08:01 (CV2.1 Ab IgG Screen by IFA, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow.   19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow.   19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow.   19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow.   19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)   CV2.1 Antibody, IgG is detected. Titer results to follow.   19-Dec-22 08:01 (GABA-AR Ab IgG C	ITPR1 Ab IgG CBA-IFA Titer, CSF	Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
IgLONS Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval IgLON5 Ab IgG CBA-IFA Titer, CSF 1:80 * 129 [< 1:1]  LGI1 Ab Titer IgG by IFA, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval LGI1 Ab IgG Titer by IFA, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval MGluR1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17 Procedure Result Units Reference Interval MGluR1 Ab IgG CBA-IFA Titer, CSF 1:80 * i31 [< 1:1]  Interpretive Text  t1: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF) AMPAR Antibody, IgG is detected. Titer results to follow.  t2: 19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF) GABA-BR Antibody, IgG is detected. Titer results to follow.  t3: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF) CASPR2 Antibody, IgG is detected. Titer results to follow.  t4: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF) LGI1 Antibody, IgG is detected. Titer results to follow.  t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF) CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF) DPPX Antibody, IgG is detected. Titer results to follow.			Units				
Procedure    IgLON5 Ab IgG CBA-IFA Titer,CSF   1:80 * 129   [ < 1:1]     LGI1 Ab Titer IgG by IFA, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17     Procedure   Result   Units   Reference Interval     LGI1 Ab IgG Titer by IFA,CSF   1:20 * 130   [ < 1:1]     IgGIN1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17     Procedure   Result   Units   Reference Interval     IgGIN1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06   Report/Verified: 19-Dec-22 08:17     Procedure   Result   Units   Reference Interval     IgGIN1 Ab IgG CBA-IFA Titer, CSF   1:80 * 131   [ < 1:1]     Interpretive Text     1:	ITPR1 Ab IgG CBA-IFA Titer,C	SF 1:20 * <sup>i28</sup>		[< 1:1]			
IgLON5 Ab IgG CBA-IFA Titer, CSF 1:80 * i29	IgLON5 Ab IgG CBA-IFA Titer, CS	Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
Procedure Result Units Reference Interval LGI1 Ab IgG Titer by IFA,CSF 1:20 * i30 [ < 1:1]  mGluRl Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17  Procedure Result Units Reference Interval  mGluRl Ab IgG CBA-IFA Titer,CSF 1:80 * i31 [ < 1:1]  TINTETPRETIVE TEXE  tl: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)     AMPAR Antibody, IgG is detected. Titer results to follow.  t2: 19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF)     GABA-BR Antibody, IgG is detected. Titer results to follow.  t3: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)     CASPR2 Antibody, IgG is detected. Titer results to follow.  t4: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)     LGI1 Antibody, IgG is detected. Titer results to follow.  t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)     CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)     DPPX Antibody, IgG is detected. Titer results to follow.			Units				
LGII Ab IgG Titer by IFA,CSF 1:20 * i30 [ < 1:1]  mGluRl Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17  Procedure Result Units Reference Interval  mGluRl Ab IgG CBA-IFA Titer,CSF 1:80 * i31 [ < 1:1]  TITET TET TEXT TEXT TITER TITER TITER TO THE TITER	LGI1 Ab Titer IgG by IFA, CSF	Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
mGluR1 Ab IgG CBA-IFA Titer, CSF   Received: 19-Dec-22 08:06 Report/Verified: 19-Dec-22 08:17  Procedure Result Units Reference Interval  mGluR1 Ab IgG CBA-IFA Titer, CSF 1:80 * i31 [< 1:1]  Therpretive Text  t: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)     AMPAR Antibody, IgG is detected. Titer results to follow.  t2: 19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF)     GABA-BR Antibody, IgG is detected. Titer results to follow.  t3: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)     CASPR2 Antibody, IgG is detected. Titer results to follow.  t4: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)     LGI1 Antibody, IgG is detected. Titer results to follow.  t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)     CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)     DPPX Antibody, IgG is detected. Titer results to follow.  t7: 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)	Procedure	Result	Units	Reference Interval			
Procedure Result Units Reference Interval mGluRl Ab IgG CBA-IFA Titer, CSF 1:80 * i31 [< 1:1]  Interpretive Text  t1: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)     AMPAR Antibody, IgG is detected. Titer results to follow.  t2: 19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF)     GABA-BR Antibody, IgG is detected. Titer results to follow.  t3: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)     CASPR2 Antibody, IgG is detected. Titer results to follow.  t4: 19-Dec-22 08:01 (IGI1 Ab IgG Screen by IFA, CSF)     LGI1 Antibody, IgG is detected. Titer results to follow.  t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)     CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)     DPPX Antibody, IgG is detected. Titer results to follow.	LGI1 Ab IgG Titer by IFA,CSF	1:20 * i30		[< 1:1]			
mGluR1 Ab IgG CBA-IFA Titer, CSF 1:80 * i31	mGluR1 Ab IgG CBA-IFA Titer, CS	Received: 19-Dec-2	22 08:06	Report/Verified: 19-Dec-22 08:17			
<pre>Interpretive Text  t1:     19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)           AMPAR Antibody, IgG is detected. Titer results to follow.  t2:     19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF)           GABA-BR Antibody, IgG is detected. Titer results to follow.  t3:     19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)           CASPR2 Antibody, IgG is detected. Titer results to follow.  t4:     19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)           LGI1 Antibody, IgG is detected. Titer results to follow.  t5:     19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)           CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6:     19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)           DPPX Antibody, IgG is detected. Titer results to follow.  t7:     19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)</pre>	Procedure	Result	Units	Reference Interval			
19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)  AMPAR Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF)  GABA-BR Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF)  CASPR2 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)  LGI1 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)  CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)  DPPX Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)	mGluR1 Ab IgG CBA-IFA Titer,	CSF 1:80 * <sup>i31</sup>		[< 1:1]			
AMPAR Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF) GABA-BR Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF) CASPR2 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF) LGI1 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF) CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF) DPPX Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)	Interpretive Text						
t2: 19-Dec-22 08:01 (GABA-B Receptor Ab IgG Screen, CSF) GABA-BR Antibody, IgG is detected. Titer results to follow.  t3: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF) CASPR2 Antibody, IgG is detected. Titer results to follow.  t4: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF) LGI1 Antibody, IgG is detected. Titer results to follow.  t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF) CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF) DPPX Antibody, IgG is detected. Titer results to follow.  t7: 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)	t1: 19-Dec-22 08:01 (AMPA Receptor Ab IgG Screen, CSF)						
GABA-BR Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF) CASPR2 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF) LGI1 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF) CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF) DPPX Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)							
t3: 19-Dec-22 08:01 (CASPR2 Ab IgG Screen by IFA, CSF) CASPR2 Antibody, IgG is detected. Titer results to follow.  t4: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF) LGI1 Antibody, IgG is detected. Titer results to follow.  t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF) CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF) DPPX Antibody, IgG is detected. Titer results to follow.  t7: 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)							
CASPR2 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)  LGI1 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)  CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)  DPPX Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)	1		results to	COTTOM.			
<pre>t4: 19-Dec-22 08:01 (LGI1 Ab IgG Screen by IFA, CSF)      LGI1 Antibody, IgG is detected. Titer results to follow. t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)      CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply. t6: 19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)      DPPX Antibody, IgG is detected. Titer results to follow. t7: 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)</pre>			regults to fo	ollow.			
LGI1 Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)  CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.  19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF)  DPPX Antibody, IgG is detected. Titer results to follow.  19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)							
<pre>t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)</pre>							
19-Dec-22 08:01 (DPPX Ab IgG CBA IFA Screen, CSF) DPPX Antibody, IgG is detected. Titer results to follow. 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)	t5: 19-Dec-22 08:01 (CV2.1 Ab IgG Screen, CSF)						
DPPX Antibody, IgG is detected. Titer results to follow. t7: 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)							
t7: 19-Dec-22 08:01 (GABA-AR Ab IgG CBA-IFA Screen, CSF)							
	DDD1 11'1 1 - ~ '		1	1			
GABA-AR Antibody, IgG is detected. Titer results to follow.		detected. Titer res		low.			

\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

IgLON5 Antibody, IgG is detected. Titer results to follow.

Unless otherwise indicated, testing performed at:

ARUP Accession:

19-Dec-22 08:01 (IgLON5 Ab IgG CBA-IFA Screen, CSF)

**ARUP Laboratories**500 Chipeta Way, Salt Lake City, UT 84108

t8:

Laboratory Director: Jonathan R. Genzen, MD, PhD

Report Request ID: 16445757

**Printed:** 23-Dec-22 13:42

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22-353-900015

PATIENT REPORT

Unknown

500 Chipeta Way, Salt Lake City, Utah 84108-1221

phone: 801-583-2787, toll free: 800-522-2787 Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

#### <u>Interpretive Text</u>

t9: 19-Dec-22 08:01 (ITPR1 Ab IgG CBA-IFA Screen, CSF)

ITPR1 Antibody, IgG is detected. Titer results to follow.

t10: 19-Dec-22 08:01 (mGluR1 Ab IgG CBA-IFA Screen, CSF)

mGluR1 Antibody, IgG is detected. Titer results to follow.

#### Result Footnote

f1: N-methyl-D-Aspartate Receptor Ab, CSF

Antibodies to NMDA were detected; titer was performed at an additional charge.

Clinical trials for anti-NMDA receptor encephalitis are currently underway (clinicaltrials.gov).

f2: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

Antibodies detected, therefore IFA titer and Immunoblot testing to be performed.

#### Test Information

il: N-methyl-D-Aspartate Receptor Ab, CSF

INTERPRETIVE INFORMATION: N-methyl-D-Aspartate

Receptor Ab, CSF

Anti-NMDA receptor IgG antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i2: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

INTERPRETIVE INFORMATION: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i3: AMPA Receptor Ab IgG Screen, CSF

INTERPRETIVE INFORMATION: AMPA Receptor Ab IgG Screen, CSF

Alpha-amino-3-hydroxy-5-methyl-4-isoxazoleproprionic acid receptor (AMPAR) antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune encephalitis.

This indirect fluorescent antibody assay utilizes AMPAR transfected cell lines for the detection and semi-quantification of AMPAR IgG antibody.

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\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

Unless otherwise indicated, testing performed at:

**ARUP Laboratories** 

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

ARUP Accession: 22-353-900015

**Printed:** 23-Dec-22 13:42

Report Request ID: 16445757

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

## Test Information

i3: AMPA Receptor Ab IgG Screen, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i4: GABA-B Receptor Ab IgG Screen, CSF

INTERPRETIVE INFORMATION: GABA-B Receptor Ab IgG Screen, CSF

Gamma-amino butyric acid receptor, type B (GABA-BR) antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune encephalitis.

This indirect fluorescent antibody assay utilizes GABA-BR transfected cell lines for the detection and semi-quantification of GABA-BR IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i5: CASPR2 Ab IgG Screen by IFA, CSF

INTERPRETIVE INFORMATION: CASPR2 Ab IgG Screen by IFA, CSF

Contactin-associated protein-2 (CASPR2) IgG antibody may occur as part of the voltage-gated potassium channel (VGKC) complex antibodies.

The presence of CASPR2 IgG antibody is associated with a wide spectrum of clinical manifestations, including acquired neuromyotonia, limbic encephalitis, painful neuropathy, and Morvan syndrome. Tumors such as thymoma, small cell lung cancer, and other rarer tumors may occur. The full-spectrum of clinical disorders and tumors associated with the CASPR2 IgG antibody continues to be defined. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes contactin-associated protein-2 (CASPR2) transfected cell lines for the detection and semi-quantification of the CASPR2 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i6: LGI1 Ab IgG Screen by IFA, CSF

INTERPRETIVE INFORMATION: LGI1 Ab IgG Screen by IFA, CSF

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500 Chipeta Way, Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

#### Test Information

i6: LGI1 Ab IgG Screen by IFA, CSF

Leucine-rich, glioma-inactivated 1 protein (LGI1) IgG antibody may occur as part of the voltage-gated potassium channel (VGKC) complex antibodies.

The presence of LGI1 IgG antibody is mainly associated with limbic encephalitis, hyponatremia, and myoclonic movements. LGI1 IgG antibody is rarely associated with tumors but may occur infrequently in Morvan syndrome, neuromyotonia, and idiopathic epilepsy. The full-spectrum of clinical disorders associated with the LGI1 IgG antibody continues to be defined. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes leucine-rich, glioma-inactivated 1 protein (LGI1) transfected cell lines for the detection and semi-quantification of the LGI1 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i7: CV2.1 Ab IgG Screen, CSF

INTERPRETIVE INFORMATION: CV2.1 IgG Ab Screen, CSF

CV2.1 antibodies aid in discriminating between chronic paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-CV2.1 is associated with small-cell lung cancer and thymoma.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS.

i8: SOX1 Antibody, IgG by Immunoblot, CSF

INTERPRETIVE INFORMATION: SOX1 Antibody, IgG by Immunoblot,

CSF

SOX1 antibody is detected in patients with Lambert-Eaton myasthenic syndrome (LEMS) and in patients with paraneoplastic cerebellar degeneration (PCD), paraneoplastic and nonparaneoplastic neuropathy. SOX1 antibody is associated with small cell lung cancer. A negative test result does not rule out a diagnosis of LEMS or other causes of paraneoplastic neurological syndrome.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

i9: Amphiphysin Antibody, CSF

INTERPRETIVE INFORMATION: Amphiphysin Antibody IgG, CSF

Amphiphysin antibody is present in about 5 percent of patients with stiff-person syndrome and is found variably in other causes of paraneoplastic neurological

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500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

## Test Information

Amphiphysin Antibody, CSF

syndrome (PNS). Amphiphysin antibody is mainly associated with small-cell lung cancer and breast tumors.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i10: DPPX Ab IgG CBA IFA Screen, CSF

INTERPRETIVE INFORMATION: DPPX Ab IqG CBA IFA Screen, CSF

Anti-DPPX IgG antibody is found in a subset of patients with autoimmune encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis.

This indirect fluorescent antibody cell-based assay (CBA) utilizes dipeptidyl aminopeptidase-like protein 6 (DPPX) transfected cells for the detection of the DPPX IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i11: GABA-AR Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: GABA-AR Ab IgG CBA-IFA Screen, CSF

Gamma-aminobutyric acid receptor, type A (GABA-AR) antibody is found in a subset of patients with autoimmune encephalitis or autoimmune epilepsy, and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis or autoimmune epilepsy. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes GABA-AR transfected cell lines for detection and semi-quantification of GABA-AR IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i12: IgLON5 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: IgLON5 Ab IgG CBA-IFA Screen, CSF

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

# Test Information

i12: IgLON5 Ab IgG CBA-IFA Screen, CSF

IgLON Family Member 5 (IgLON5) antibody is found in a subset of patients with autoimmune encephalitis or other autoimmune neurologic/neurodegenerative disorders and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of an autoimmune neurologic disorder. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes IgLON5 transfected cell lines for detection and semi-quantification of IgLON5 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

il3: ITPR1 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: ITPR1 Ab IgG CBA-IFA Screen, CSF

Inositol 1, 4, 5-trisphosphate receptor type 1 (ITPR1) antibody is found in a subset of patients with autoimmune cerebellar ataxia, encephalitis, neuropathy, or myelopathy and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune cerebellar ataxia or related autoimmune neurologic disorders. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes ITPR1 transfected cell lines for detection and semi-quantification of ITPR1 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i14: mGluR1 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Screen, CSF

Metabotropic glutamate receptor 1 (mGluR1) antibody is found in a subset of patients with autoimmune cerebellar ataxia or autoimmune encephalitis and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune cerebellar ataxia or limbic encephalitis. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes mGluR1 transfected cell lines for detection and semi-quantification of mGluR1 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug

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Laboratory Director: Jonathan R. Genzen, MD, PhD

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex: Unknown

## Test Information

i14: mGluR1 Ab IgG CBA-IFA Screen, CSF

Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i15: Voltage-Gated Potassium Channel Ab, CSF

INTERPRETIVE INFORMATION: Voltage-Gated Potassium Channel

(VGKC) Antibody, CSF

Voltage-Gated Potassium Channel (VGKC) antibodies are associated with neuromuscular weakness as found in neuromyotonia (also known as Issacs syndrome) and Morvan syndrome. VGKC antibodies are also associated with paraneoplastic neurological syndromes and limbic encephalitis; however, VGKC antibody-associated limbic encephalitis may be associated with antibodies to leucine-rich, glioma-inactivated 1 protein (LGI1) or contactin-associated protein-2 (CASPR2) instead of potassium channel antigens. A substantial number of VGKC-antibody positive cases are negative for LGI1 and CASPR2 IgG autoantibodies, not all VGKC complex antigens are known. The clinical significance of this test can only be determined in conjunction with the patient's clinical history and related laboratory testing.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i16: Glutamic Acid Decarboxylase Antibody CSF

INTERPRETIVE INFORMATION: Glutamic Acid Decarboxylase

Antibody, CSF

A value greater than  $5.0~{\rm IU/mL}$  is considered positive for glutamic acid decarboxylase antibody (GAD AB CSF).

This assay is intended for the semi-quantitative determination of the GAD Ab in human CSF. Results should be interpreted within the context of clinical symptoms.

See Compliance Statement B: www.aruplab.com/CS

i17: Neuronal Nuclear Ab (Hu) IgG, IB, CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Hu)

IgG, IB, CSF

This test detects IgG antineuronal antibodies to Hu, Ri, and Yo and Tr (DNER) antigens.

Antineuronal antibodies serve as markers that aid in discriminating between a true paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-Hu (antineuronal nuclear antibody, type I) is associated with small cell lung cancer. Anti-Ri (antineuronal nuclear antibody, type II) is associated with neuroblastoma in children and with fallopian tube and breast cancer in adults. Anti-Yo (anti-Purkinje cell cytoplasmic antibody) is associated with ovarian and breast cancer. Anti-Tr(DNER) is associated with Hodgkin's lymphoma.

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221

phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

#### Test Information

i17: Neuronal Nuclear Ab (Hu) IgG, IB, CSF

> The presence of one or more of these antineuronal antibodies supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i18: Neuronal Nuclear Ab (Ri) IgG, IB, CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Ri) IgG, IB,

CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i19: Neuronal Nuclear Ab (Yo) IgG, IB, CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Yo) IgG, IB,

CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Ab (TR/DNER) IgG, CSF i20:

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (TR/DNER)

IgG, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i21: Neuronal Nuclear Ab Titer, IgG CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab Titer, IgG CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i22: AMPA Receptor Ab IgG Titer, CSF

INTERPRETIVE INFORMATION: AMPA Receptor Ab IgG Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i23: CASPR2 Ab IgG Titer by IFA, CSF

INTERPRETIVE INFORMATION: CASPR2 Ab Titer IgG by IFA, CSF

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221

phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

#### Test Information

i23: CASPR2 Ab IgG Titer by IFA, CSF

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

i24: CV2.1 Antibody IgG Titer by IFA, CSF

INTERPRETIVE INFORMATION: CV2.1 Antibody IgG Titer

by IFA, CSF

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS.

i25: DPPX Ab IgG CBA IFA Titer, CSF

INTERPRETIVE INFORMATION: DPPX IgG Ab Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i26: GABA-AR Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: GABA-AR Ab IgG CBA-IFA Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i27: GABA-B Receptor Ab IgG Titer, CSF

INTERPRETIVE INFORMATION: GABA-B Receptor Ab IgG Titer, CSF

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

i28: ITPR1 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: ITPR1 Ab IgG CBA-IFA Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i29: IgLON5 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: IgLON5 Ab IgG CBA-IFA Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i30: LGI1 Ab IgG Titer by IFA, CSF

INTERPRETIVE INFORMATION: LGI1 Ab Titer IgG by IFA, CSF

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Unless otherwise indicated, testing performed at:

ARUP Laboratories

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

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PATIENT REPORT

500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

#### Test Information

i31:

i30: LGI1 Ab IgG Titer by IFA, CSF

Test developed and characteristics determined by ARUP Laboratories. See Compliance

Statement D: aruplab.com/CS mGluR1 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Titer, CSF

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