



3415A 3 Ave NW, Calgary, Alberta, T2N 0M4, Canada

**Patient Name:** Patient, Name**Specimen ID (SID):** 25-001-0000**DOB:** 01-Jan-2000**PHN:** AB 0000000**Reason for Testing:** Encephalitis**Relevant Medications:** -**External SID:** 123456789**Doctor:** Dr. Doctor**Report Date:** 12-Mar-2025**Specimen Type:** CSF**Date/Time Collected:** 01-Jan-2025 / 00:00**Specimen Source:** MitogenDx**Cytokine, Chemokine & Growth Factor Panel****Laboratory Developed Test (LDT)****Report Summary:****Sample Comments:**

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Results Summary:**High Analytes:** BAFF, BCA-1, G-CSF, GRO α , I-309, IFN- α 2, IL-1 α , IL-1RA, IL-5, IL-6, IL-8, IL-10, IL-12p40, IL-17A, IL-17F, IL-18, IL-27, IL-31, MCP-3, MDC, MIP-1 α , MIP-3 β , sCD137, sCD40L, TNF α , TSLP**Moderate High Analytes:** APRIL, Eotaxin, Eotaxin-2, Granzyme B, IL-12p70, IL-15, IL-35, LIF, MCP-2, MCP-4**Moderate Low Analytes:** TRAIL**Results Interpretation:**

The immune activation profile suggests a potential type 1 response characterized by initiation/propagation factors (IL-12p70, IL-18, IL-27), a type 2 response with effector cytokines (IL-5, IL-31), and a type 3 response with effector cytokines (IL-17A, IL-17F). Additionally, there is an active anti-inflammatory profile, indicated by high levels of immunosuppressive factors (IL-10, IL-35) and a cytokine receptor antagonist (IL-1RA).

Disclaimer:

The interpretation of these test results should be correlated with clinical findings and other diagnostic tests. Biomarker levels can vary due to many biological, physiological, and diurnal factors; their clinical significance must be assessed by a qualified healthcare professional. This information is not intended to be used as the sole basis for diagnosis or treatment decisions.

Reviewed by: DP**Eve Technologies Corporation is a CLIA certified High Complexity International Laboratory**



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Cytokine, Chemokine & Growth Factor Panel**Laboratory Developed Test (LDT)**

Analyte	Results (pg/ml)	Reference Interval†	Analyte	Results (pg/ml)	Reference Interval†
6CKine*	< 293	0 - 293	IL-20	14.1	4.1 - 36.0
APRIL	525	160 - 562	IL-21	< 2.4	0 - 6.7
BAFF	473 HIGH	122 - 345	IL-22*	< 16.0	0 - 16.0
BCA-1	42.3 HIGH	0 - 2.7	IL-23*	< 97.7	0 - 97.7
CCL28*	< 122	0 - 122	IL-24*	< 24.4	0 - 24.4
CTACK*	< 7.3	0 - 7.3	IL-27	570 HIGH	0 - 250
EGF*	< 4.0	0 - 4.0	IL-28A*	< 9.8	0 - 9.8
ENA-78	8.4	3.9 - 13.4	IL-29*	< 12.2	0 - 12.2
Eotaxin	4.5	0 - 5.5	IL-31*	2.3 HIGH	0 - 1.2
Eotaxin-2	6.8	0 - 8.0	IL-33*	< 19.5	0 - 19.5
Eotaxin-3	1.3	0 - 3.8	IL-34	7.8	6.3 - 38.4
FGF-2	< 16.0	0 - 20.3	IL-35*	< 12.2	0 - 12.2
FLT-3L	9.3	0.9 - 17.2	IP-10	337	15 - 1854
Fractalkine	41.1	0 - 73.1	I-TAC	1.4	0 - 7.6
GCP-2	5.4	0.2 - 8.7	LIF*	< 2.4	0 - 2.4
G-CSF*	462 HIGH	0 - 6.0	Lymphotactin*	< 29.3	0 - 29.3
GM-CSF	< 3.2	0 - 3.9	MCP-1	608	86 - 1661
Granzyme A	10.1	7.7 - 34.9	MCP-2	3.4	0.4 - 3.4
Granzyme B	1.8	0 - 2.0	MCP-3	6.0 HIGH	0 - 4.4
GRO α	57.6 HIGH	0 - 15.6	MCP-4*	< 1.7	0 - 1.7
HMGB1	< 537	0 - 861	M-CSF	89.3	21 - 283
I-309	144 HIGH	1.5 - 6.0	MDC	23.1 HIGH	0.1 - 10.4
IFN- α 2	6.7 HIGH	0 - 3.7	MIG	48.0	3 - 173
IFN β *	< 4.9	0 - 4.9	MIP-1 α *	11.9 HIGH	0 - 2.0
IFN γ	< 0.2	0 - 0.4	MIP-1 β	1.4	0.5 - 8.4
IFN ω *	< 2.4	0 - 2.4	MIP-1 δ	72.4	30 - 252
IL-1 α *	16.5 HIGH	0 - 3.0	MIP-3 α	0.2	0 - 0.2
IL-1 β	< 2.0	0 - 3.7	MIP-3 β	136 HIGH	16.9 - 77.0
IL-1RA	109 HIGH	0 - 3.6	MPIF-1	7.0	1.1 - 19.7
IL-2*	< 0.4	0 - 0.4	PDGF-AA	91.4	7 - 127
IL-3*	< 0.4	0 - 0.4	PDGF-AB/BB*	< 12.0	0 - 12.0
IL-4	0.1	0 - 0.1	Perforin	< 18.3	0 - 26.0
IL-5	3.7 HIGH	0.3 - 2.8	RANTES	7.9	0.6 - 10.6
IL-6	415 HIGH	0.5 - 8.5	sCD137	2.7 HIGH	0 - 1.3
IL-7*	< 0.4	0 - 0.4	sCD40L	15.3 HIGH	0 - 8.3
IL-8	305 HIGH	5.5 - 68.2	SCF	255	76 - 429
IL-9	6.9	1.5 - 11.0	SDF-1	2257	837 - 6392
IL-10	10.6 HIGH	0 - 3.3	sFas (ng/ml)	2.2	0.6 - 3.2
IL-11	< 1.2	0 - 1.8	sFasL	18.0	8.6 - 35.2
IL-12p40	28.7 HIGH	0 - 9.7	TARC	1.2	0 - 2.0
IL-12p70*	< 1.0	0 - 1.0	TGF α	3.4	0.9 - 5.7
IL-13*	< 4.0	0 - 4.0	TNF α	14.4 HIGH	0 - 4.5
IL-15	13.3	2.2 - 15.6	TNF β *	< 1.0	0 - 1.0
IL-16	13.7	4.9 - 33.5	TPO	16.1	0 - 61.0
IL-17A*	2.0 HIGH	0 - 0.8	TRAIL	1.5	1.3 - 4.1
IL-17E/IL-25	< 1.6	0 - 3.0	TSLP	1.4 HIGH	0 - 0.7
IL-17F*	7.7 HIGH	0 - 2.1	VEGF-A*	< 0.8	0 - 0.8
IL-18	15.6 HIGH	0 - 1.0			

† Reference intervals estimated by data-mining ≥ 200 CSF samples drawn from both healthy and pathological subjects.

* Upper reference limit defined as the lower limit of quantification (LLOQ) for this analyte.