

Inflammatory Bowel Disease Immune Monitoring With Epiontis ID

Despite considerable new treatment approaches for inflammatory bowel disease (IBD), objective evidence of disease remission for both ulcerative colitis and Crohn's disease has been modest. Emerging patient phenotypes suggest that patient profiling may be a key element for clinical trial success.

Monitoring of specific cell types can provide crucial information into disease status and progression. Epiontis ID provides a wide portfolio of assays that monitor cell types relevant to IBD.

Key Cell Types Rapidly Quantified via Prevalidated Epiontis ID Panels

Treg & Th17 Cell Balance:

- Significant in the pathogenesis of IBD
- Simple to measure via Epiontis ID; can be challenging via other methods

Integrin alpha 4 positive cells:

- Immune cell trafficking—crucial in IBD
- Monitoring of migration markers by Epiontis ID both in blood and tissue

B Cells, T Cells, NK Cells, Granulocytes:






- Neutrophil to lymphocyte ratio (NLR) changes common in autoimmune diseases
- Epiontis ID allows precise monitoring of NLR cells in whole blood

CXCR3+ Expressing Cells:

- CXCR3+ cells shown to be recruited to inflamed sites in colon
- Assay detects activated T cells, both in blood or tissue

Next Generation Immune Monitoring With Epiontis ID

Epiontis ID is an immune monitoring service supporting the development of today's most innovative therapeutics, allowing researchers to profile and uncover specific changes to the immune system by measuring cell type-specific epigenetic markers in DNA.

 <p>Precise and Reproducible Results</p> <p>Operator-independent technology for consistent results within and across studies</p>	 <p>Increased Study Flexibility</p> <p>Analyze fresh or frozen whole blood, dried blood spots, and even tissue</p>	 <p>Simplified Logistics</p> <p>No need for complex sample preparation or rushed shipments</p>	 <p>Rapid Data Delivery</p> <p>With over 30 prevalidated cell type assays, data can be delivered within days of project initiation</p>	 <p>Proven Clinical Utility</p> <p>Over 68,000 samples analyzed across more than 100 clinical trials; dozens of study sponsor posters and publications</p>
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Over 30 prevalidated cell types available including:

- Overall CD3 T cells
- 8 additional T cell subtypes including Treg, Tfh, Th17
- B cells, naive/memory B cells
- All granulocyte subtypes
- Monocytes, myeloid MDSC
- Plasmacytoid dendritic cells
- Exhaustion markers: PD1+ and LAG3+ cells
- Activation markers: CXCR3+, CCR6+, CCR7+, GNLy+
- Migration markers: ITGA4+, S1PR1+, S1PR5+, CRTH2+
- Other cell types, including fibrocytes

An Ideal Tool for Autoimmune Clinical Studies

Epiontis ID has been used in numerous phase 1 to phase 4 clinical studies, and is an ideal tool to support autoimmune therapeutic development, as demonstrated by the use of Epiontis ID in specific autoimmune indications.

Autoimmune Indication	No. of Studies	Study Phase	Sample Types
Asthma	2	Phase 2b	Blood
Atopic dermatitis	5	Research, phase 1b, 2a, 2b	Blood, tissue
Behcet's syndrome	1	Phase 4	Blood
Celiac disease	1	Preclinical	Blood
Chronic rhinosinusitis	1	Phase 2a	Blood
Chronic spontaneous urticaria	1	Research	Blood, tissue
Crohn's disease	4	Phase 3	Blood
Crohn's, MS, ulcerative colitis	2	Phase 1	Blood
Diabetes	2	Research, phase 2	Blood, cells
GvHD	5	Phase 3	Blood, tissue, PBMC, cells
IBD	1	Preclinical	Tissue
Lupus	3	Phase 1, 2	Blood
Multiple sclerosis	2	Phase 1, 2	Blood
Myasthenia gravis	1	Phase 2	DNA
Peanut allergy	1	Preclinical	Blood
Psoriasis	7	Phase 1, 1b, 2, 4	Blood, tissue
Rheumatoid arthritis	4	Research, phase 1b, 2, 2b	Blood
Sjogren's syndrome	5	Phase 1, 2a	Blood, DNA, PBMC
Ulcerative colitis	2	Phase 2	Blood, tissue

For more information about Epiontis ID, please visit Epiontis.com.