



Human C-C motif chemokine 27 (CCL27) ELISA Kit

Product Code	CSB-E09125h
Abbreviation	CCL27
Protein Biological Process 1	Cytokine
Target Name	C-C motif chemokine 27 (CCL27)
Uniprot No.	Q9Y4X3
Alias	ALP, CTACK, CTAK, ESKINE, ILC, PESKY, SCYA27, CC chemokine ILC IL-11 Ralpha-locus chemokine cutaneous T-cell attracting chemokine skinkine small inducible cytokine A27 small inducible cytokine subfa
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.313 ng/mL-20 ng/mL
Sensitivity	0.043 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	CCL27
Tag Info	quantitative
Protein Description	Sandwich

Description

This human CCL27 ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of human CCL27 in multiple samples, including serum, plasma, or tissue homogenates. It also uses the enzyme-substrate chromogenic reaction to visualize and analyze the analyte levels through the color intensity. The intensity of the colored product is in direct proportion to the CCL27 levels in the sample and is measured at 450 nm through a microplate reader.

CCL27 is an inflammatory chemokine mainly expressed by skin keratinocytes. It is associated with homing of memory T cells to sites of inflammation. CCR10 is the only known receptor for CCL27. Studies have shown that CCL27/CCR10



axis primarily functions in aiding the establishment of tissue-resident lymphocytes and maintenance of skin immune homeostasis. CCL27 expression is linked to normal skin development and keratinocyte differentiation. In healthy skin, CCL27 expression was predominantly detected in keratinocytes of the epidermis and hair follicles (HF) in both humans and mice. CCL27 expression is inhibited in the lesional skin of various skin inflammatory diseases such as psoriasis, hidradenitis suppurativa (HS), and alopecia areata. Kraynyak *et al.* have shown that CCL27 has adjuvant activity, enhancing immune responses to HIV-1 and SIV antigens.

Target Details

This gene is one of several CC cytokine genes clustered on the p-arm of chromosome 9. Cytokines are a family of secreted proteins involved in immunoregulatory and inflammatory processes. The CC cytokines are proteins characterized by two adjacent cysteines. This protein is chemotactic for skin-associated memory T lymphocytes. This cytokine may also play a role in mediating homing of lymphocytes to cutaneous sites. It specifically binds to chemokine receptor 10 (CCR10). Studies of a similar murine protein indicate that these protein-receptor interactions have a pivotal role in T cell-mediated skin inflammation.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human CCL27 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	85
	Range %	81-88
1:2	Average %	95
	Range %	90-101
1:4	Average %	104
	Range %	101-107
1:8	Average %	89
	Range %	85-93

Recovery

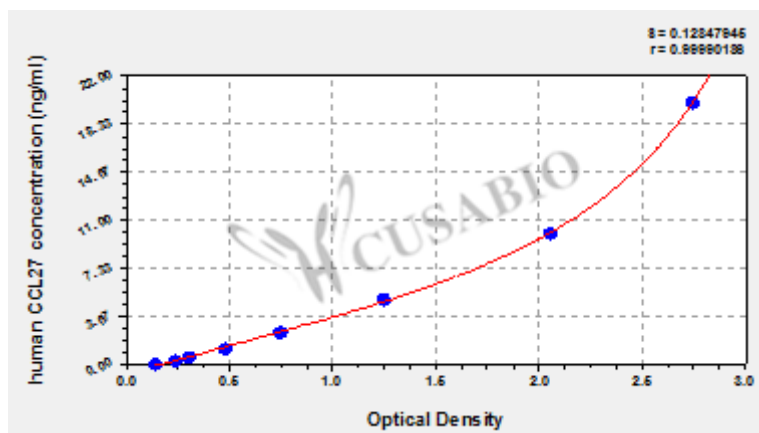
The recovery of human CCL27 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	97	94-100
EDTA plasma (n=4)	105	101-109



Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
20	2.715	2.768	2.742	2.589
10	2.097	2.014	2.056	1.903
5	1.276	1.234	1.255	1.102
2.5	0.752	0.768	0.760	0.607
1.25	0.481	0.498	0.490	0.337
0.625	0.327	0.310	0.319	0.166
0.313	0.257	0.244	0.251	0.098
0	0.156	0.150	0.153	?

Msds

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