Human S100 calcium binding protein A8/calgranulin A,S100A8 ELISA Kit

Product Code	CSB-E11833h
Protein Biological Process 2	chemokine
Abbreviation	S100A8
Protein Biological Process 1	Immunity
Target Name	S100 calcium binding protein A8
Uniprot No.	P05109
Alias	60B8AG, CAGA, CFAG, CGLA, CP-10, L1Ag, MA387, MIF, MRP8, NIF, P8, OTTHUMP00000015330|S100 calcium-binding protein A8|S100 calcium-binding protein A8 (calgranulin A)|calgranulin A|cystic fibrosis ant
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Chemotaxis
Sample Types	serum, plasma, tissue homogenates
Detection Range	1.25 ng/mL-80 ng/mL
Sensitivity	0.31 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	Others
Gene Names	S100A8
Tag Info	quantitative
Protein Description	Sandwich
Description	The human S100A8 ELISA Kit is engineered for accurate measurement of human S100A8 levels from samples including serum, plasma, or tissue homogenates. It uses the Sandwich-ELISA mechanism in combination with the enzyme-substrate chromogenic reaction to measure the S100A8 content in the sample. The color intensity is positively correlated with S100A8 content in the sample. The S100A8 concentration can be calculated according to the standard

curve. This kit is tested with high sensitivity, strong specificity, good linearity, high precision and recovery, as well as lot-to-lot consistency.

S100A8 binds to cell surface receptors that trigger signaling pathways to participate in the inflammatory process and plays a key role in multiple cellular processes, including cell survival, cell cycle progression, differentiation, proliferation, and cell migration. High expression of S100A8 has been found in various inflammation-related diseases like inflammatory bowel disease and solid cancers like breast cancer. S100A8 contributes to tumor growth, metastasis development, angiogenesis, and immune escape in a wide variety of solid cancers.

Target Details

This protein is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in the inhibition of casein kinase and as a cytokine. Altered expression of this protein is associated with the disease cystic fibrosis.

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 S100A8 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 %	89
	Range %	83-95
1:2	Average %	95
	Range %	91-99
1:4	Average %	95
	Range %	88-101
1:8	Average %	98
	Range %	91-102

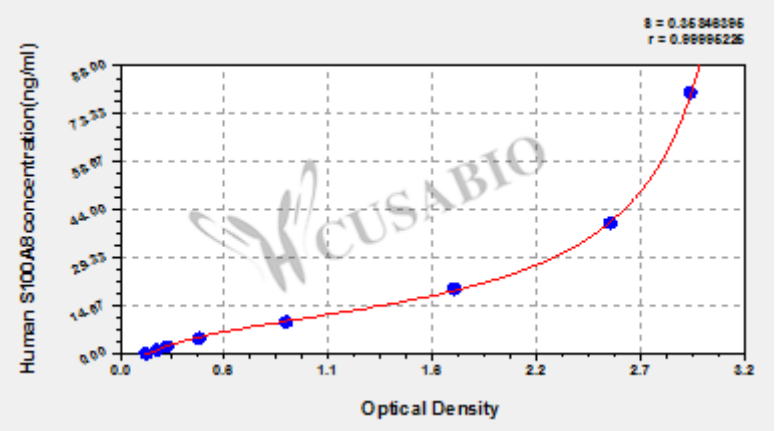
Recovery

The recovery of human S100A8 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)	85	81-93
EDTA plasma (n=4)	95	93-102

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
80	2.945	2.962	2.954	2.800
40	2.567	2.504	2.536	2.382
20	1.676	1.799	1.738	1.584
10	0.849	0.887	0.868	0.714
5	0.441	0.411	0.426	0.272
2.5	0.263	0.251	0.257	0.103
1.25	0.201	0.211	0.206	0.052
0	0.155	0.152	0.154	?

Msds

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