Rat Arachidonate 5-lipoxygenase (Alox5) ELISA kit

Product Code	CSB-E16982r
Abbreviation	Alox5
Protein Biological Process 1	Immunity
Target Name	Arachidonate 5-lipoxygenase (Alox5)
Uniprot No.	P12527
Alias	RP11-67C2.3, 5-LO, 5-LOX, 5LPG, LOG5, MGC163204, arachidonic acid 5-lipoxygenase|leukotriene A4 synthase
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Leukotriene biosynthesis
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 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	Alox5
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat Alox5 ELISA Kit was designed for the quantitative measurement of Rat Alox5 protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.156 ng/mL-10 ng/mL and the sensitivity is 0.039 ng/mL.
Target Details	This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetrenoic acid (leukotriene A4). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the

promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants have been observed, but their full-length nature has not been determined.

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 rat Alox5 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 %	96
	Range %	92-100
1:2	Average %	102
	Range %	95-106
1:4	Average %	90
	Range %	83-94
1:8	Average %	93
	Range %	88-97

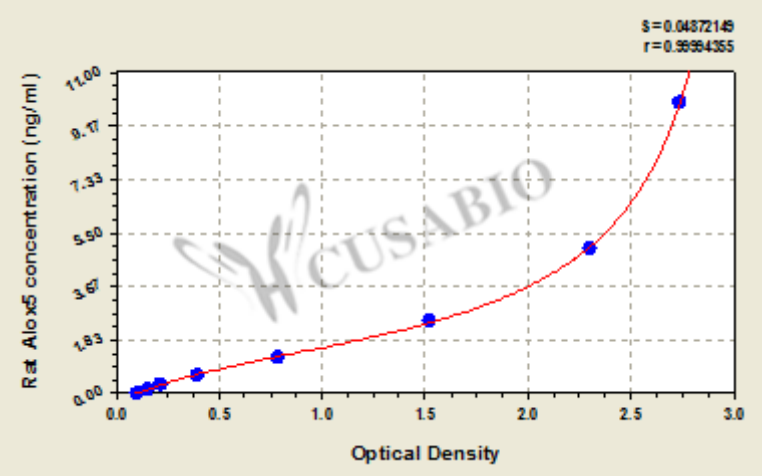
Recovery

The recovery of rat Alox5 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)	90	84-95
EDTA plasma (n=4)	100	92-105

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
10	2.817	2.743	2.780	2.666
5	2.369	2.304	2.337	2.223
2.5	1.574	1.521	1.548	1.434
1.25	0.825	0.789	0.807	0.693
0.625	0.418	0.402	0.410	0.296
0.312	0.234	0.228	0.231	0.117
0.156	0.161	0.165	0.163	0.049
0	0.113	0.115	0.114	?

Msds

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