

Rat MIP-1 α Antibody Pair Set

Catalog No.	E-KAB-0376	Applications	ELISA
Synonyms	CCL3, LD78ALPHA, MIP-1-alpha, MIP1A, SCYA3, G0S19-1		

Kit components & Storage

Title	Specifications	Storage
Rat MIP-1 α Capture Antibody	1 vial, 100 μ g	Store at -20°C for one year. Avoid freeze / thaw cycles.
Rat MIP-1 α Detection Antibody (Biotin)	1 vial, 50 μ L	Store at -20°C for one year. Avoid freeze / thaw cycles.

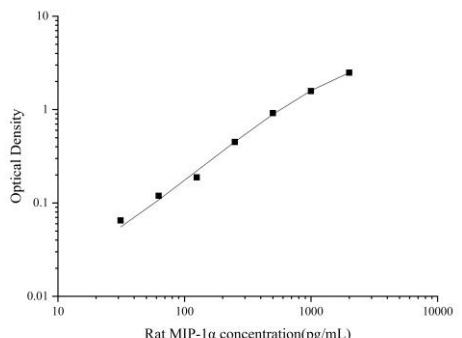
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0376)	
		Rat MIP-1 α Capture Antibody	Rat MIP-1 α Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat MIP-1 α protein	Recombinant Rat MIP-1 α protein
	Swissprot	P50229	
Product details	Reactivity	Rat	Rat
	Host	Sheep	Sheep
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Antigen Affinity	Antigen Affinity
	Specificity	Detects Rat MIP-1 α in ELISAs.	

Applications

Rat MIP-1 α Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images														
ELISA Capture	0.5-4 μ g/mL	Rat MIP-1 α Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Rat MIP-1α concentration (pg/mL). The y-axis (Optical Density) ranges from 0.01 to 10, and the x-axis (Rat MIP-1α concentration) ranges from 10 to 10000. Six data points are plotted, showing a clear upward trend that appears linear on this scale.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat MIP-1α concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0.05</td> </tr> <tr> <td>50</td> <td>0.1</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>200</td> <td>0.4</td> </tr> <tr> <td>500</td> <td>1.0</td> </tr> <tr> <td>1000</td> <td>2.0</td> </tr> </tbody> </table>	Rat MIP-1 α concentration (pg/mL)	Optical Density	20	0.05	50	0.1	100	0.2	200	0.4	500	1.0	1000	2.0
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ELISA Detection	1:1000-1:10000	Rat MIP-1 α Detection Antibody (Biotin)															

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

MIP-1 alpha (macrophage inflammatory protein 1 alpha) is a member of the CC or beta chemokine subfamily that was originally purified from the conditioned media of an LPS-stimulated murine macrophage cell line.

MIP-1 alpha acts as a chemoattractant to a variety of cells including monocytes, T cells, B cells and eosinophils. The two human MIP-1 alpha genes arise by duplication/mutation. They code for MIP-1 alpha isoforms CCL3/LD78a and CCL3L1/LD78b, which share 94% amino acid sequence homology. Whereas the human CCL3/LD78a is a single-copy gene, the human CCL3L1/LD78b gene copy number varies within the population. Human CCL3L1/LD78b binds and signals through chemokine receptors CCR1, CCR5. When compared to CCL3/LD78a, CCL3L1/LD78b has higher binding affinity to CCR5, which also functions as a coreceptor for HIV-1 entry. The copy number of CCL3L1 is one of several genetic determinants of HIV-1 susceptibility.