

Rat IL-1 β Antibody Pair Set

Catalog No.	E-KAB-0104	Applications	ELISA
Synonyms	IL1B, IL1-BETA, IL1F2, catabolin		

Kit components & Storage

Title	Specifications	Storage
Rat IL-1 β Capture Antibody	1 vial, 100 μ g	Store at -20 $^{\circ}$ C for one year. Avoid freeze / thaw cycles.
Rat IL-1 β Detection Antibody (Biotin)	1 vial, 50 μ L	Store at -20 $^{\circ}$ C for one year. Avoid freeze / thaw cycles.

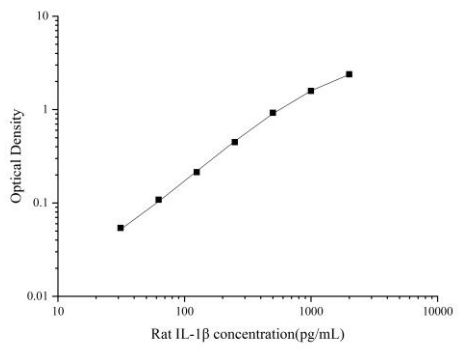
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0104)	
		Rat IL-1 β Capture Antibody	Rat IL-1 β Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat IL-1 β protein	Recombinant Rat IL-1 β protein
	Swissprot	Q63264	
Product details	Reactivity	Rat	Rat
	Host	Goat	Goat
	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 IL-1 β in ELISAs.		

Applications

Rat IL-1 β Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images										
ELISA Capture	0.5-4 μ g/mL	Rat IL-1 β Capture Antibody	 <p>The graph displays a standard curve for the Rat IL-1β Sandwich ELISA Assay. The x-axis represents the concentration of Rat IL-1β in pg/mL, ranging from 10 to 10,000 on a logarithmic scale. The y-axis represents the Optical Density, ranging from 0.01 to 10 on a logarithmic scale. The data points show a clear positive correlation, indicating that as the concentration of Rat IL-1β increases, the optical density also increases proportionally.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat IL-1β concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>0.05</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>1000</td> <td>0.8</td> </tr> <tr> <td>10000</td> <td>3.0</td> </tr> </tbody> </table>	Rat IL-1 β concentration (pg/mL)	Optical Density	10	0.05	100	0.2	1000	0.8	10000	3.0
Rat IL-1 β concentration (pg/mL)	Optical Density												
10	0.05												
100	0.2												
1000	0.8												
10000	3.0												
ELISA Detection	1:1000-1:10000	Rat IL-1 β Detection Antibody (Biotin)											

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

Background

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.