

## Mouse IL-1 $\alpha$ Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0565	<b>Applications</b>	ELISA
<b>Synonyms</b>	IL1A;IL1-A;IL1;IL1F1;Preinterleukin 1 Alpha;Hematopoietin-1;Pro-Interleukin-1-Alpha		

### Kit components & Storage

Title	Specifications	Storage
Mouse IL-1 $\alpha$ Capture Antibody	1 vial, 100 $\mu$ g	Store at -20°C for one year. Avoid freeze/thaw cycles.
Mouse IL-1 $\alpha$ Detection Antibody (Biotin)	1 vial, 50 $\mu$ L	Store at -20°C for one year. Avoid freeze/thaw cycles.

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

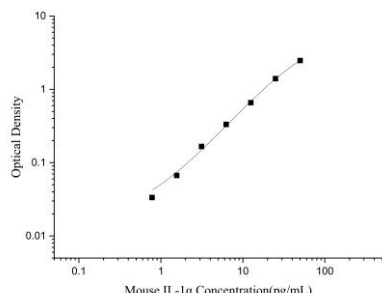
### Product Information

Items		Characteristic (E-KAB-0565)	
		Mouse IL-1 $\alpha$ Capture Antibody	Mouse IL-1 $\alpha$ Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse IL-1 $\alpha$ protien	Recombinant Mouse IL-1 $\alpha$ protien
	Swissprot	/	
Product details	Reactivity	Mouse	Mouse
	Host	Hamster	Rat
	Conjugation	Unconjugated	Biotin
	Concentration	0.5 mg/mL	/
	Buffer	PBS with 0.04% Proclin 300; 50% glycerol; pH 7.5	PBS with 0.04% Proclin 300; 1% protective protein; 50% glycerol; pH 7.5
	Purify	Protein A or G	Protein A or G
	Specificity	Detects Mouse IL-1 $\alpha$ in ELISAs.	

### For Research Use Only

## Applications

Mouse IL-1 $\alpha$  Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4 $\mu\text{g/mL}$	Mouse IL-1 $\alpha$ Capture Antibody	 <table><caption>Approximate data points from the standard curve</caption><thead><tr><th>Mouse IL-1<math>\alpha</math> Concentration (pg/mL)</th><th>Optical Density</th></tr></thead><tbody><tr><td>0.5</td><td>0.03</td></tr><tr><td>1</td><td>0.06</td></tr><tr><td>2</td><td>0.12</td></tr><tr><td>5</td><td>0.25</td></tr><tr><td>10</td><td>0.5</td></tr><tr><td>20</td><td>1.0</td></tr><tr><td>50</td><td>2.0</td></tr></tbody></table>	Mouse IL-1 $\alpha$ Concentration (pg/mL)	Optical Density	0.5	0.03	1	0.06	2	0.12	5	0.25	10	0.5	20	1.0	50	2.0
Mouse IL-1 $\alpha$ Concentration (pg/mL)	Optical Density																		
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ELISA Detection	1:1000-1:10000	Mouse IL-1 $\alpha$ Detection Antibody (Biotin)																	

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

## Background

Cytokine constitutively present intracellularly in nearly all resting non-hematopoietic cells that plays an important role in inflammation and bridges the innate and adaptive immune systems. After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex. Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4. In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways. Within the cell, acts as an alarmin and cell death results in its liberation in the extracellular space after disruption of the cell membrane to induce inflammation and alert the host to injury or damage. In addition to its role as a danger signal, which occurs when the cytokine is passively released by cell necrosis, directly senses DNA damage and acts as a signal for genotoxic stress without loss of cell integrity.