

## Human SOD2 Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0238	<b>Applications</b>	ELISA
<b>Synonyms</b>	IPOB, IPO-B, MNSOD, Mn-SOD, MVCD6		

### Kit components & Storage

Title	Specifications	Storage
Human SOD2 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human SOD2 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

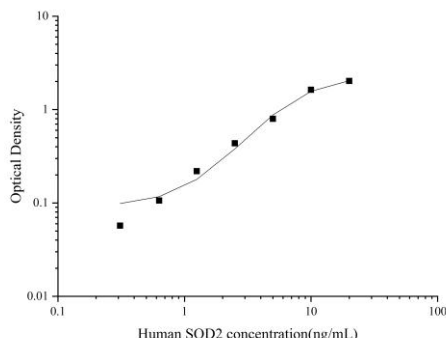
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0238)	
		Human SOD2 Capture Antibody	Human SOD2 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human SOD2 protein	Recombinant Human SOD2 protein
	Swissprot	P04179	
Product details	Reactivity	Human	Human
	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 Human SOD2 in ELISAs.	

## Applications

Human SOD2 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Human SOD2 Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Human SOD2 concentration (ng/mL). The x-axis ranges from 0.1 to 100 ng/mL, and the y-axis ranges from 0.01 to 10. The data points show a clear upward trend, indicating that as the concentration of Human SOD2 increases, the optical density also increases. The curve is smooth and follows a power-law relationship.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human SOD2 concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.2</td> <td>0.05</td> </tr> <tr> <td>0.5</td> <td>0.1</td> </tr> <tr> <td>1</td> <td>0.2</td> </tr> <tr> <td>2</td> <td>0.4</td> </tr> <tr> <td>5</td> <td>0.8</td> </tr> <tr> <td>10</td> <td>1.5</td> </tr> <tr> <td>20</td> <td>2.5</td> </tr> </tbody> </table>	Human SOD2 concentration (ng/mL)	Optical Density	0.2	0.05	0.5	0.1	1	0.2	2	0.4	5	0.8	10	1.5	20	2.5
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ELISA Detection	1:1000-1:10000	Human SOD2 Detection Antibody (Biotin)																	

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

## Background

SOD2 (superoxide dismutase 2, mitochondrial) is also named as IPOB, MNSOD, SODM, Mn-SOD and belongs to the iron/manganese superoxide dismutase family. It is a marker of mitochondria, which is restricted to the perinuclear area in a cell with aggregate formation of mutant SOD1. It functions as the first line of antioxidant defense against highly reactive superoxide radicals and it appears to be early predictors for survival in septic patients with MIF. It has 2 isoforms with the molecular weight of 25 kDa and 21 kDa.