

Mouse SHH Antibody Pair Set

Catalog No.	E-KAB-0332	Applications	ELISA
Synonyms	HHG1, HLP3, HPE3, MCOPCB5, SMMCI, TPT, TPTPS, Sonic hedgehog		

Kit components & Storage

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

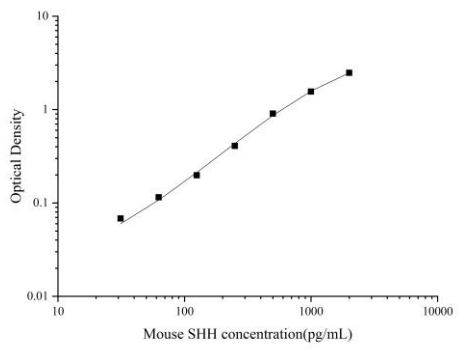
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0332)	
		Mouse SHH Capture Antibody	Mouse SHH Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse SHH protein	Recombinant Mouse SHH protein
	Swissprot	Q62226	
Product details	Reactivity	Mouse	Mouse
	Host	Rat	Rat
	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	Protein A or G	Protein A or G
	Specificity	Detects Mouse SHH in ELISAs.	

Applications

Mouse SHH Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Mouse SHH Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Mouse SHH concentration (pg/mL). The x-axis ranges from 10 to 10,000 pg/mL, and the y-axis ranges from 0.01 to 10. The data points form a straight line, indicating a power-law relationship between concentration and optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse SHH 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>0.8</td> </tr> <tr> <td>1000</td> <td>1.5</td> </tr> <tr> <td>2000</td> <td>2.5</td> </tr> </tbody> </table>	Mouse SHH concentration (pg/mL)	Optical Density	20	0.05	50	0.1	100	0.2	200	0.4	500	0.8	1000	1.5	2000	2.5
Mouse SHH concentration (pg/mL)	Optical Density																		
20	0.05																		
50	0.1																		
100	0.2																		
200	0.4																		
500	0.8																		
1000	1.5																		
2000	2.5																		
ELISA Detection	1:1000-1:10000	Mouse SHH Detection Antibody (Biotin)																	

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

Background

Mouse Sonic Hedgehog Homolog (SHH) belongs to a three-protein family called Hedgehog. The other two family members are Indian Hedgehog (IHH) and Desert Hedgehog (DHH). Hedgehog proteins are key signaling molecules in embryonic development. SHH is expressed in various embryonic tissues and plays critical roles in regulating the patterning of many systems, such as limbs and brain. SHH also plays an important role in adult, including the division of adult stem cells and the development of certain cancers and other diseases. Mouse Shh is synthesized as a 437 aa precursor that contains a 24 aa signal sequence and a 413 aa mature region. The mature region is autocatalytically processed into a nonglycosylated, 20 kDa, 174 aa N-terminal fragment (Shh-N), and a catalytic-processing, glycosylated, 34 kDa, 239 aa C-terminal fragment. The 20 kDa Shh-N fragment is the core of the active hedgehog molecule. Mouse Shh-N is 99%, 98%, and 100% aa identical to human, rat and gerbil Shh-N, respectively.