



20150116ML

# Anti-Mouse Sonic Hedgehog (#6K12)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>103-M476</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat) immunized with mouse recombinant protein of Shh (N-terminal).

## Target Background

<b>Synonyms (Target):</b>	Shh; Hx; Dsh; Hhg1; Hxl3; M100081; 9530036O11Rik
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Human Shh cDNA encodes a 462 amino acid (aa) residue (45 kDa) precursor protein with a 23 aa signal peptide. An autocatalytic cleavage reaction yields a 19 kDa (residues 24 - 197) amino-terminal fragment (Shh-N), and a 25 kDa (residues 198 - 462) carboxy-terminal domain (Shh-C). The N-terminal domain retains all known signaling capabilities, while the C-terminal domain is responsible for the intramolecular processing, acting as a cholesterol transferase that covalently transfers the cholesterol molecule to the C-terminus of Shh-N. When Shh is expressed in insect or mammalian cells, a palmitoyl group is also attached to the N-terminal cysteine of Shh-N via an amide linkage. Although the binding affinity to their receptors is not changed, lipid-modified Shh-N proteins are more potent than the unmodified proteins in cell-based assays. Other hydrophobic modifications to unmodified Shh-N, including the substitution of the N-terminal cysteine residue with two hydrophobic isoleucine residues, can also increase Shh-N potency.

## Database References Target

<b>Protein RefSeq:</b>	NP_033196.1
<b>Uniprot ID:</b>	Q62226
<b>mRNA RefSeq:</b>	NM_009170.3

## Product Specifications

<b>Host</b>	Rat
<b>Reactivity against</b>	Mouse
<b>Clonality</b>	Monoclonal Antibody
<b>Clone</b>	(#6K12)
<b>Isotype</b>	IgG2
<b>Purification</b>	Protein G chromatography
<b>Antigen</b>	recombinant mouse Shh (N-terminal) fragment
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	PBS (sterile)

**Reconstitution:** Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

**Stability:** Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

**Remarks:** This antibody detects specifically mouse Shh with WB.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

The antibody can be used within the following applications:

WB, IHC (F), N

**Recommended usage:**

**WB:** 1:250-1000

**IHC (frozen):** 1:50-200

**Neutralization:** Yes

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**