

Product datasheet for **AM33478PU-N**

Shh (N-term) Rat Monoclonal Antibody [Clone ID: 6K12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	6K12
Applications:	IHC, Neutralize, WB
Recommended Dilution:	Western Blot: 1/250-1/1000. Neutralization. Immunohistochemistry on Frozen Sections: 1/50-1/200.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2
Clonality:	Monoclonal
Immunogen:	Recombinant Mouse Sonic Hedgehog (Shh) N-Terminal fragment.
Specificity:	This antibody detects Mouse Shh with Western Blot.
Formulation:	State: Purified State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore with 0.2 ml sterile PBS and the final concentration is 0.5 mg/ml.
Purification:	Affinity Chromatography on Protein A/G
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	sonic hedgehog
Database Link:	Entrez Gene 20423 Mouse Q62226



[View online »](#)

Background:

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.

Synonyms:

Sonic hedgehog protein, HHG-1