

Product Information

Anti-Sonic Hedgehog Peptide (N-terminal)

produced in goat, affinity isolated antibody

Catalog Number **S9572**

Product Description

Anti-Sonic Hedgehog Peptide (N-terminal) is produced in goats immunized with purified, *E. coli*-derived, recombinant mouse 6× histidine-tagged Sonic Hedgehog (rmShh) N-terminal peptide and C-terminal peptide (GeneID 20423). Shh N-terminal peptide specific IgG was purified by mouse Shh N-terminal peptide affinity column.

Anti-Sonic Hedgehog Peptide (N-terminal) recognizes mouse Sonic Hedgehog N-terminal peptide. Applications include immunoblotting and immunohistochemistry. Based on immunoblotting, this antibody shows less than 1% cross-reactivity with 6× histidine-tagged rmShh C-terminal peptide (amino acids 199-437).

Sonic Hedgehog (Shh) is an important cell signaling molecule expressed during embryonic development. It is involved in patterning of the developing embryonic systems such as the nervous system, somite, and limb. The N-terminal peptide of Shh is released by autoproteolysis and functions through interactions with a multicomponent receptor complex containing the transmembrane proteins Patched and Smoothed. Shh is expressed in key embryonic tissues such as Hensen's node, the zone of polarizing activity in the posterior limb bud, the notochord, and the floor plate of the neural tube. Downstream targets of Shh include the transcription factors Gli3, responsible for Greigs polycephalosyndactyly in humans, and Hoxd13, responsible for polysyndactyly.¹⁻⁶

Reagent

Lyophilized from 0.2 μm-filtered solution in phosphate buffered saline containing carbohydrates.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 mL of 0.2 μm filtered PBS to produce a 0.1 mg/mL stock solution. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at -20 °C. The reconstituted product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in frost-free freezers, is not recommended.

Product Profile

Immunoblotting: a working antibody concentration of 0.1–0.2 μg/mL is recommended. The detection limit for rmShh N-terminal peptide is ~1 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry: a working dilution of 15 μg/mL is recommended.

Note: In order to obtain the best results using various techniques and preparations, determination of optimal working dilutions by titration test is recommended.

Endotoxin: <0.2 EU/μg antibody as determined by the LAL method.

References

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