

DESCRIPTION

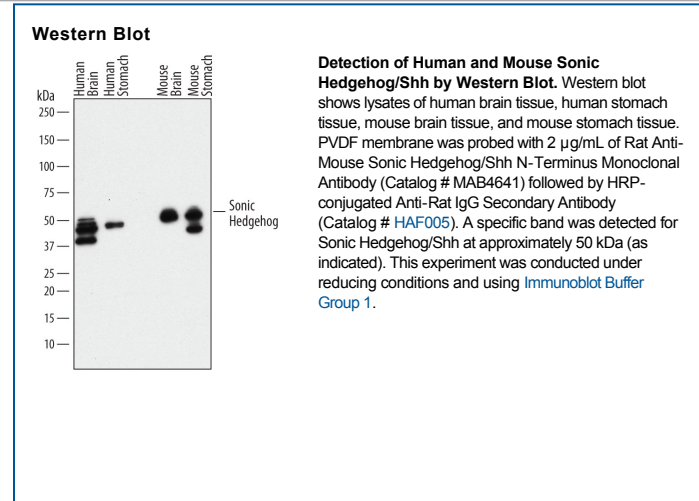
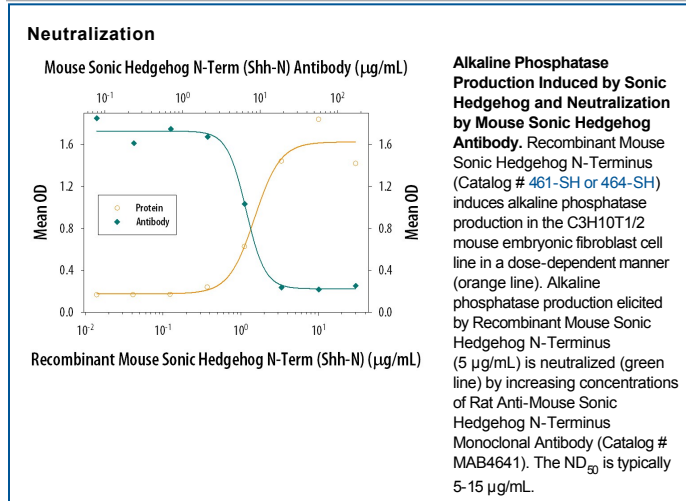
Species Reactivity	Mouse
Specificity	Detects mouse Sonic Hedgehog in ELISAs. In Western blots, approximately 50% cross-reactivity with recombinant mouse (rm) Dhh (N-terminus; aa 23-198) is observed and no cross-reactivity with rmlhh (N-terminus; aa 66-240), rmDhh (C-terminus; aa 199-396), or rmShh (C-terminus; aa 199-437) is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 171018
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Sonic Hedgehog Cys25-Gly198 (Lys122Arg) Accession # Q62226
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Mouse Sonic Hedgehog Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse Sonic Hedgehog/Shh N-Terminus Antibody (Catalog # MAB4641)
ELISA Detection	0.5-2.0 µg/mL	Mouse Sonic Hedgehog/Shh N-Terminus Biotinylated Antibody (Catalog # BAM4642)
Standard		Recombinant Mouse Sonic Hedgehog/Shh N-Terminus (Catalog # 461-SH)
Neutralization	Measured by its ability to neutralize Sonic Hedgehog-induced alkaline phosphatase production in the C3H10T1/2 mouse embryonic fibroblast cell line. The Neutralization Dose (ND ₅₀) is typically 5-15 µg/mL in the presence of 5 µg/mL Recombinant Mouse Sonic Hedgehog N-Terminus.	

DATA



Immunohistochemistry



Sonic Hedgehog/Shh in Mouse Embryo.
Sonic Hedgehog/Shh was detected in immersion fixed frozen sections of mouse embryo (11 d.p.c.) using Rat Anti-Mouse Sonic Hedgehog/Shh N-Terminus Monoclonal Antibody (Catalog # MAB4641) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to developing brain. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Sonic Hedgehog (Shh) is a hedgehog protein that is instrumental in patterning the early embryo. 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.