

DESCRIPTION

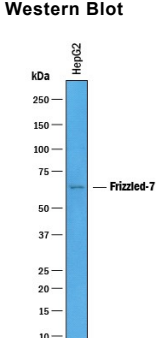
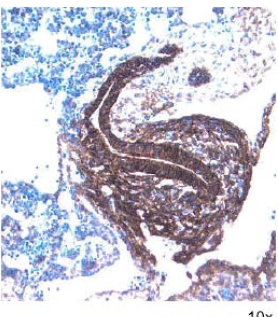
Species Reactivity	Mouse
Specificity	Detects mouse Frizzled-7 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant mouse (rm) Frizzled-2 and less than 5% cross-reactivity with rmFrizzled-3, rmFrizzled-4, rhFrizzled-5, rmFrizzled-6, rmFrizzled-8, and rmFrizzled-9 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Frizzled-7 Gln33-Leu185 Accession # Q61090
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	0.25 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Western Blot	Immunohistochemistry
 <p>Detection of Mouse Frizzled-7 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Mouse Frizzled-7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF198) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for Frizzled-7 at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	 <p>Frizzled-7 in Embryonic Mouse Gastrointestinal Tract. Frizzled-7 was detected in immersion fixed frozen sections of embryonic mouse gastrointestinal tract (11 d.p.c.) using 15 µg/mL Goat Anti-Mouse Frizzled-7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF198) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

The Wnt genes encode a large family of glycoproteins that are essential in development and tissue maintenance (1). Members of the Frizzled family of proteins serve as receptors for the Wnt signaling pathway (2). The predicted structure of Frizzled proteins is similar among all family members, containing a divergent N-terminal signal peptide, a highly conserved extracellular cysteine-rich domain (CRD), a variable-length linker region, a seven-pass transmembrane region, and a variable-length C-terminal cytoplasmic domain. The CRD, which comprises the Wnt binding site, spans about 130 amino acid residues and contains ten invariant cysteine residues. Mouse Frizzled-7 contains 572 amino acid residues and shares 99% identity with the human orthologue in the CRD (3, 4). Frizzled-7 mRNA has been detected in relatively large amounts in adult skeletal muscle, placenta and heart, and fetal kidney and lung (3). Several Frizzled-dependent signaling pathways exist (2). Their activation depends on the Wnt ligand and the cell context. Frizzled-7 can activate canonical Wnt/β-Catenin signaling, as well as a non-canonical pathway involved in tissue morphogenesis (4, 5).

References:

1. Wodarz, A. and R. Nusse (1998) *Annu. Rev. Cell Dev. Biol.* **14**:59.
2. Hsieh, J.-C. (2004) *Front. Biosci.* **9**:1333.
3. Sagara, N. *et al.* (1998) *Biochem. Biophys. Res. Commun.* **252**:117.
4. Sheldahl, L.C. *et al.* (1999) *Curr. Biol.* **9**:695.
5. Medina, A. *et al.* (2000) *Mech. Dev.* **92**:227.