

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects recombinant mouse Follistatin-like 4/FSTL4 in direct ELISAs. Detects human, mouse, and rat Follistatin-like 4/FSTL4 in Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) FSTL4 is observed, and less than 5% cross-reactivity with rhFSTL5 and recombinant mouse FSTL1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Follistatin-like 4/FSTL4 Trp23-Val841 Accession # Q5STE3
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

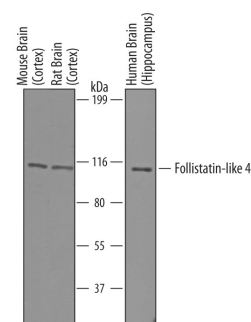
APPLICATIONS

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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

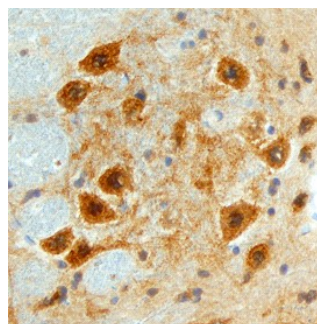
DATA

Western Blot



Detection of Human, Mouse, and Rat Follistatin-like 4/FSTL4 by Western Blot. Western blot shows lysates of mouse brain (cortex) tissue, rat brain (cortex) tissue, and human brain (hippocampus) tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Mouse Follistatin-like 4/FSTL4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5245) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for Follistatin-like 4/FSTL4 at approximately 110 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

Immunohistochemistry



Follistatin-like 4/FSTL4 in Mouse Brain. Follistatin-like 4/FSTL4 was detected in perfusion fixed frozen sections of mouse brain using Goat Anti-Human/Mouse/Rat Follistatin-like 4/FSTL4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5245) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of neurons in the brainstem. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#). This application has not been tested in human or rat samples.

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

FSTL4 (Follistatin-like protein 4; also FSL4, SPIG1 and D/Bsp1201-1) is a likely secreted, 90 kDa (predicted) member of the follistatin gene family of TGF-β superfamily inhibitors. It is widely expressed, being found in neurons (retinal ganglion and cerebellar Purkinje cells), cardiac muscle cells, smooth muscle cells and intestinal epithelium. Mature mouse FSTL4 is 819 amino acids (aa) in length (aa 23-841). It contains one kazal-like domain (aa 80-134), an EF-hand motif (aa 173-208), and two Ig-like domains (aa 250-336 and 340-425). There are two potential splice forms, one that shows an alternative start site at Met315, and a second that possesses a His residue substitution for aa 518-841. Full-length mature mouse FSTL4 shares 95% and 84% aa identity with rat and human FSTL4, respectively.