

DESCRIPTION

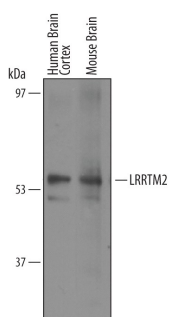
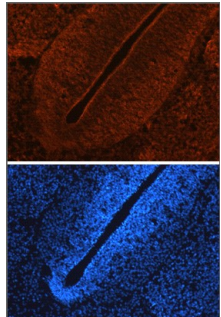
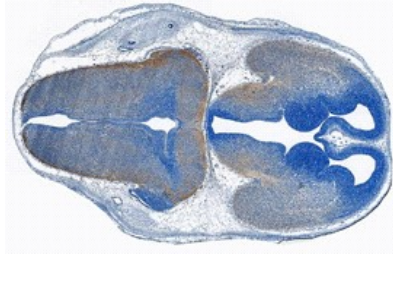
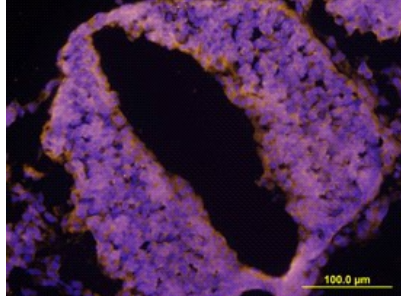
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse LRRTM2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) LRRTM1, rhLRRTM3, and rhLRRTM4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LRRTM2 Cys34-Arg422 Accession # O43300
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

<p>Western Blot</p>  <p>Detection of Human/Mouse LRRTM2 by Western Blot. Western blot shows lysates of human brain cortex and mouse brain tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse LRRTM2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5589) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for LRRTM2 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunohistochemistry</p>  <p>LRRTM2 in Embryonic Mouse Neural Tube. LRRTM2 was detected in immersion fixed frozen sections of embryonic mouse neural tube (E10.5) using 10 µg/mL Sheep Anti-Human/Mouse LRRTM2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5589) overnight at 4 °C. Tissue was stained with the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). View our protocol for Fluorescent IHC Staining of Frozen Tissue Sections.</p>
<p>Immunohistochemistry</p>  <p>LRRTM2 in Mouse Embryo. LRRTM2 was detected in immersion fixed frozen sections of mouse embryo (15 d.p.c.) using Sheep Anti-Human/Mouse LRRTM2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5589) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>	<p>Immunohistochemistry</p>  <p>LRRTM2 in Mouse Neural Tube. LRRTM2 was detected in immersion fixed frozen sections of mouse neural tube (E9.5) using Sheep Anti-Human/Mouse LRRTM2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5589) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (yellow; Catalog # NL010) and counterstained with DAPI (blue). View our protocol for Fluorescent 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

LRRTM2 (leucine rich repeat transmembrane protein # 2) is a 59 kDa (predicted) member of the LRRTM family of proteins. All members of this family are type I transmembrane proteins that contain 10 external LRR repeats plus a short cytoplasmic tail that binds PDF motifs. LRRTM2 is found in deep neurons of the hippocampus (CA1-CA3), dentate gyrus granule cells, and cerebellar granular cells, and in almost all peripheral tissues at some level. Mature human LRRTM2 is 483 amino acids (aa) in length. The extracellular region contains ten LRRs (aa 61-299), followed by a 73 aa cytoplasmic tail (aa 444-516). Over aa 34-422, human LRRTM2 shares 98% aa identity with mouse LRRTM2.