

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human LRRTM3 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant mouse (rm) LRRTM3 and no cross-reactivity with recombinant human LRRTM1, 2, or 4 is observed. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 568318 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human LRRTM3 Glu31-Lys419 Accession # Q86VH5 |
| 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. |

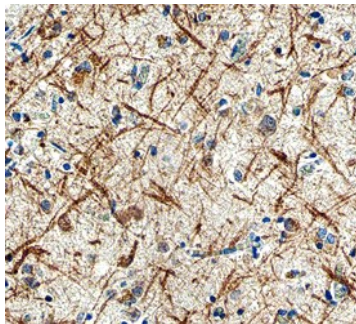
APPLICATIONS

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 |
|-----------------------------|----------------------------------|---------------|
| Immunohistochemistry | 8-25 µg/mL | See Below |

DATA

Immunohistochemistry



LRRTM3 in Human Brain. LRRTM3 was detected in immersion fixed paraffin-embedded sections of human brain with Alzheimer's disease using Human LRRTM3 Monoclonal Antibody (Catalog # MAB4898) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

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| Reconstitution | Sterile PBS to a final concentration of 0.5 mg/mL. |
| 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

Human LRRTM3 (leucine-rich repeat transmembrane neuronal 3) is a 63 kDa (predicted) type I transmembrane glycoprotein that is one of four LRRTM family members within the LRR protein superfamily (1). The LRRTM3 cDNA encodes 581 amino acids (aa), including a 389 aa extracellular region that shares 98% aa identity with mouse and rat LRRTM3. Isoform 2 lacks cytoplasmic aa 514-581. LRRTMs in mouse show distinct expression patterns during formation of the central nervous system (CNS) and expression persists in adult brain. LRRTM3 promotes processing of amyloid precursor protein by BACE1, and may be mutated in late-onset Alzheimer's disease.