Human DOCK3 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG

Catalog Number: AF7134

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DOCK3 in direct ELISAs. In direct ELISAs, less than 3% cross-reactivity with recombinant human (rh) DOCK1, rhDOCK2, and rhDOCK5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human DOCK3 Gly418-Thr656 Accession # Q8IZD9
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.

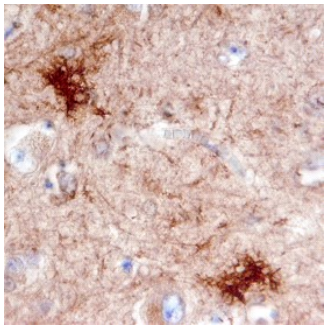
APPLICATIONS

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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



DOCK3 in Human Brain. DOCK3 was detected in immersion fixed paraffin-embedded sections of human Alzheimer's brain (cortex) using Sheep Anti-Human DOCK3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7134) at 3 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 hemotoxylin (blue). Specific staining was localized to neurofibrillary tangles. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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.** ● 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

DOCK3 (Dedicator of cytokinesis protein 3; also MOCA and PBP) is a 230-240 kDa member of the DOCK family, DOCK180 superfamily of proteins. DOCK3 expression appears to be restricted to neurons where it binds to Rac1 in conjunction with WAVE1, enhancing both Rac1 activity and that of downstream JNK. This results in cytoskeleton rearrangement and the promotion of axonal outgrowth. DOCK3 also binds to β-catenin, thereby inhibiting Wnt signaling and promoting cell adhesion. Human DOCK3 is 2030 amino acids (aa) in length. It contains one protein-interaction SH3 domain (aa 7-650), a DHR-1 region that localizes DOCK3 to cell membranes (aa 418-654), a DHR-2 domain that likely binds to nucleotide-free GTPases and shows GEF activity (aa 1122-1630), and one SH3-binding motif (aa 1970-1976). There is one phosphorylation site at Ser2013 and, unlike DOCK180, DOCK3 is known to form intracellular aggregates. There are three potential isoform variants. Two result from the use of alternative start sites at Met346 and Met388, while a third shows a deletion of aa 106-123 coupled to a Gly substitution for aa 184-2030. Over aa 418-656, human DOCK3 shares 99% aa identity with mouse DOCK3.

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