Human/Mouse/Rat Endophilin A1/SH3GL2 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG

Catalog Number: AF8006

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Endophilin A1/SH3GL2 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Endophilin A1/SH3GL2 Ala217-Pro293 Accession # Q99962
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.

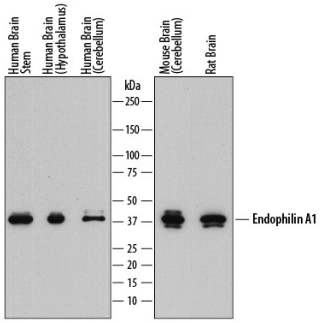
APPLICATIONS

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

DATA

Western Blot



Detection of Human, Mouse, and Rat Endophilin A1/SH3GL2 by Western Blot. Western blot shows lysates of human brain stem tissue, human brain (hypothalamus) tissue, human brain (cerebellum) tissue, mouse brain (cerebellum) tissue, and rat brain tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Endophilin A1/SH3GL2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8006) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Endophilin A1/SH3GL2 at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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

Endophilin A1 (also SH3GL2, SH3P4, EEN-B1, CNS-A2, GL2 and SH3D2A) is a 39-42 kDa member of the A subfamily, endophilin (attracted to endocytic protein) family of molecules. It is a neuronally-expressed cytosolic protein that is concentrated in presynaptic areas. Endophilin A1 is a key player in clathrin-associated endocytosis, participating in invagination plus vesicle fission and recycling. It is able to impact membrane curvature through electroststic differences via its N-terminus, and interact with multiple synaptic region proteins such as dynamin and synaptojanin through an SH3 homology domain at its C-terminus. Although Endophilin A1 is a monomer in the cytosol, it will homodimerize and heterodimerize with endophilin-2 when active at the synapse. Endophilin A1 is also associated with endocytic trafficking of growth factor receptors. In concert with CIN85, Cbl and ataxin-2, Endophilin A1 extend the half-life of EGFR at the plasma membrane. Human Endophilin A1 is 352 amino acids (aa) in length. It contains an aforementioned N-terminal BAR domain (aa 18-249) plus an SH3 domain that binds Pro-rich aa sequences (aa 290-349). There is one potential alternative start site at Met36. Endophilin A1 is one of three groupA endophilin isoforms, all of which are the product of separate genes. Although the -A2 and -A3 isoforms share approximately 70% aa overall sequence identity with -A1, over aa 217-293, -A2 and -A3 share less than 50% aa sequence identity with Endophilin A1. Over this same aa sequence, human and mouse Endophilin A1 share more that 97% aa sequence identity.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449