

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NAIP in Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse (rm) NAIP or rmNAIP2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 541609
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NAIP Asn923-Val1148 Accession # Q13075
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	8-25 µg/mL	See Below

DATA

<p>Western Blot</p> <p>Detection of Human NAIP by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line either mock transfected or transfected with human NAIP and human brain (cerebellum) tissue. PVDF Membrane was probed with 1 µg/mL of Human NAIP Monoclonal Antibody (Catalog # MAB829) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for NAIP at approximately 160 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>	<p>Immunohistochemistry</p> <p>NAIP in Human Brain. NAIP was detected in immersion fixed paraffin-embedded sections of human brain (cerebellum) using Human NAIP Monoclonal Antibody (Catalog # MAB829) 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). Specific staining was localized to Purkinje neurons. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

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

Neuronal apoptosis inhibitory protein (NAIP; also Baculoviral IAP repeat-containing protein 1) is a 160 kDa member of the inhibitor of apoptosis family of proteins (also known as BIRC proteins). Human NAIP is 1403 amino acids (aa) in length. It contains three distinct regions: an N-terminal cluster of three baculoviral inhibitory repeat (BIR) domains, a central nucleotide binding oligomerization domain (NOD), and a C-terminal leucine-rich repeat (LRR) domain. Human NAIP shares 68% aa identity with mouse NAIP. NAIP is expressed in motor neurons, but not in sensory neurons. It is also expressed in the liver, placenta and to a lesser extent in the spinal cord. NAIP prevents motor neuron apoptosis, and defects in NAIP have been found in individuals with spinal muscular atrophy.