

DESCRIPTION

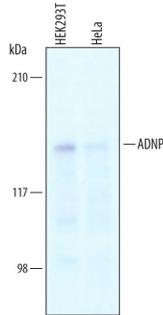
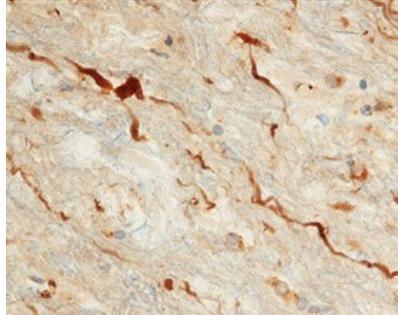
Species Reactivity	Human
Specificity	Detects human ADNP in direct ELISAs. In direct ELISAs, approximately 15% cross-reactivity with recombinant mouse ADNP is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human ADNP Leu941-Ala1102 Accession # Q9H2P0
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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human ADNP by Western Blot. Western blot shows lysates of HEK293T human embryonic kidney cell line and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human ADNP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6737) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for ADNP at approximately 124 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>ADNP in Human Brain. ADNP was detected in immersion fixed paraffin-embedded sections of human brain (inferior colliculus) using Goat Anti-Human ADNP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6737) at 10 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-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell processes. 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 0.2 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. <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

ADNP (Activity-dependent neuroprotective protein-1) is a member of a small family of VIP-induced neurotrophic factors. Although its predicted MW is 124 kDa, it runs anomalously at 150 kDa in SDS-PAGE. ADNP is known to be expressed by endothelium, astrocytes, neurons, macrophages, monocytes and B cells, and serves to down-regulate inflammation in immune cells, while acting to promote neuronal survival in response to stress or injury. Human ADNP is 1102 amino acids (aa) in length. It has no definitive signal sequence, but is reported to be found both extracellularly and intracellularly, where it shuttles between cytoplasm and nucleus. Full-length ADNP contains nine consecutive C2H2-type zinc finger regions (aa 74-686), followed by a DNA-binding homeobox domain (aa 754-814). There are 12 utilized phosphoserine sites, two C-terminal acetylated lysines, an NLS (aa 716-733), an NES (aa 788-804) and one NAPVSIPQ (NAP) motif (aa 354-361) that likely mediates the ADNP neuroprotective function. Over aa 941-1102, human ADNP shares 93% aa identity with mouse ADNP.