

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat PAK7 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 444703
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PAK7 Met1-Glu134 Accession # Q9P286
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.

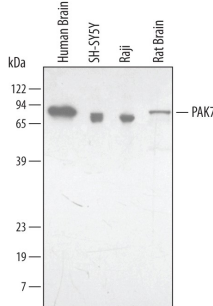
APPLICATIONS

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

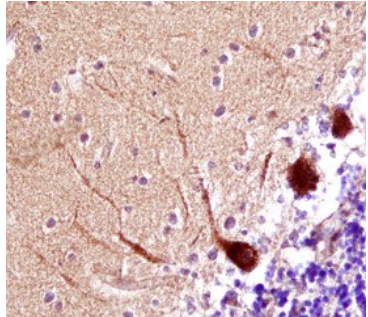
DATA

Western Blot



Detection of Human/Rat PAK7 by Western Blot. Western blot shows lysates of human brain tissue, SH-SY5Y human neuroblastoma cell line, Raji human Burkitt's lymphoma cell line, and rat brain tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human/Rat PAK7 Monoclonal Antibody (Catalog # MAB4696) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PAK7 at approximately 85 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.

Immunohistochemistry



PAK7 in Human Brain. PAK7 was detected in immersion fixed paraffin-embedded sections of human brain (cerebellum) using 25 µg/mL Mouse Anti-Human/Rat PAK7 Monoclonal Antibody (Catalog # MAB4696) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific labeling was localized to Purkinje cell bodies and dendrites. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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

PAK7 (p21-activated kinase 7), also called PAK5, is a neuronal member of the PAK-II subfamily within the STE Ser/Thr protein kinase family. In the portion used as immunogen, human PAK7 shares 95% aa sequence identity with rat PAK7. This portion contains a CDC42/Rac1 interactive binding (CRIB) motif and potential phosphorylation sites at Ser104 and Thr107. In addition, PAK7 also interacts with RhoD and RhoH, directing its subcellular localization. PAK7 can be located in the mitochondrion, where it protects cells from apoptosis, or in the nucleus.