Human MCPH1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF3998

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human, mouse and rat MCPH1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human MCPH1 Met1-Lys250 Accession # Q8NEM0
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.

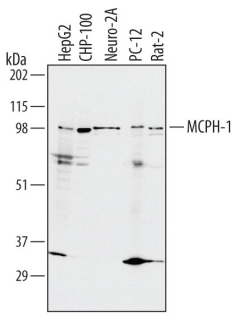
APPLICATIONS

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 MCPH1 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, CHP-100 human neuroblastoma cell line, PC-12 rat adrenal pheochromocytoma cell line, Rat-2 rat embryonic fibroblast cell line, and Neuro-2A mouse neuroblastoma cell line. PVDF membrane was probed with 1 µg/mL of Human MCPH1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3998) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for MCPH1 at approximately 105 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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.** ● 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

MCPH1 (microcephalin 1), originally identified as an inhibitor of hTERT expression, has been implicated in DNA damage response. MCPH1 contains one N-terminal and two C-terminal BRCT domains. BRCT domains are found predominantly in cell cycle proteins responsive to DNA damage. MCPH1 forms irradiation-induced nuclear foci (IRIF) that colocalize with NBS1, 53BP1, MDC1, and ATM and are abolished with MCPH1 specific siRNA. MCPH1 also regulates the ATR pathway. It colocalizes with ATR and RPA and is required for the phosphorylation of RPA and Rad17. Defects in MCPH1 are the cause of primary microcephaly 1, an autosomal recessive neurodevelopmental disorder.

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