Human/Mouse/Rat UCH-L1/PGP9.5 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6007

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat UCH-L1/PGP9.5 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human UCH-L3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human UCH-L1/PGP9.5 Gln2-Ala223 Accession # P09936
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.

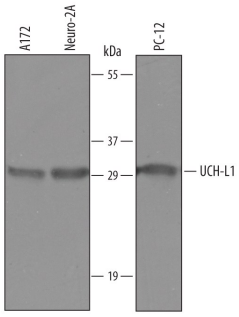
APPLICATIONS

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
Simple Western	10 µg/mL	See Below

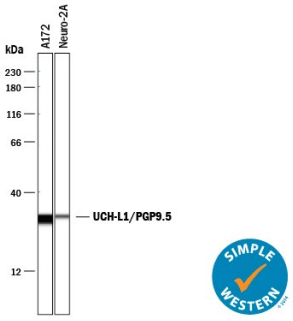
DATA

Western Blot



Detection of Human, Mouse, and Rat UCH-L1/PGP9.5 by Western Blot. Western blot shows lysates of A172 human glioblastoma cell line, Neuro-2A mouse neuroblastoma cell line, PC-12 rat adrenal pheochromocytoma cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse/Rat UCH-L1/PGP9.5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6007) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for UCH-L1/PGP9.5 at approximately 29 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Simple Western



Detection of Human and Mouse UCH-L1 by Simple Western™. Simple Western lane view shows lysates of A172 human glioblastoma cell line and Neuro-2A mouse neuroblastoma cell line, loaded at 0.2 mg/mL. A specific band was detected for UCH-L1/PGP9.5 at approximately 30 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human/Mouse/Rat UCH-L1/PGP9.5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6007) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

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

Deubiquitination is a critical regulatory process in the ubiquitin-proteasome pathway (1). Ubiquitin C-terminal hydrolases (UCHs) are a family of cysteine proteases that catalyze the hydrolysis of a peptide bond at the C-terminal glycine of ubiquitin. Members of the UCH family have been implicated in a number of human diseases, including neurodegenerative diseases and cancers (2). Mutations of the UCH-L1 gene and alterations of the protein activity have been found to be associated with several neurodegenerative disorders, including Parkinson's, Huntington's and Alzheimer's diseases (3). It is also implicated in cancer tumorigenesis, including lung, breast, liver, kidney, colorectal and ovarian cancers (4-8). UCH-L1 is thought to be a tumor suppressor and biomarker for hepatocellular carcinoma and other digestive tumors.

References:

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