

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Cubilin in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) Notch-2 and rhNotch-3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Cubilin Ser36-Gly126 Accession # O60494
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	Immersion fixed paraffin-embedded sections of human kidney
Simple Western	10 µg/mL	See Below

DATA

Western Blot

Detection of Human, Mouse, and Rat Cubilin by Western Blot. Western blot shows lysates of human, mouse, and rat kidney tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse/Rat Cubilin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3700) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Cubilin at approximately 500 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

Detection of Mouse Cubilin by Simple Western™. Simple Western lane view shows lysates of mouse kidney tissue, loaded at 0.2 mg/mL. A specific band was detected for Cubilin at approximately 500 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human Cubilin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3700) 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 66-440 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. <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

Cubilin is a 460 kDa protein that is a component of a multiligand endocytic receptor complex, which also contains amnionless, megalin and LRP2. The receptor complex is expressed in several absorptive epithelia, including kidney proximal tubule, yolk sac, and the small intestine. Human Cubilin is synthesized as a 3623 residue precursor with a signal peptide, an amino-terminal domain, eight EGF-like repeats and 27 Cub domains. Co-expression with amnionless is required for the membrane anchoring, ER export and internalizing action of Cubilin. Within the region used as the immunogen, human, mouse and rat Cubilin share approximately 76% amino acid sequence homology.