

Anti-Cubilin antibody



Description Rabbit polyclonal to Cubilin.

Model STJ92520

Host Rabbit

Reactivity Human

Applications ELISA, IHC

Immunogen Synthesized peptide derived from human Cubilin.

Immunogen Region N-terminal

Gene ID <u>8029</u>

Gene Symbol <u>CUBN</u>

Dilution range IHC 1:100-1:300ELISA 1:40000

Specificity Cubilin Polyclonal Antibody detects endogenous levels of Cubilin protein.

Tissue Specificity Expressed in kidney proximal tubule cells, placenta, visceral yolk-sac cells

and in absorptive intestinal cells. Expressed in the epithelium of intestine and

kidney.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Cubilin 460 kDa receptor Intestinal intrinsic factor receptor Intrinsic factor-

cobalamin receptor Intrinsic factor-vitamin B12 receptor

Molecular Weight 398.726 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:2548OMIM:261100

Alternative Names Cubilin 460 kDa receptor Intestinal intrinsic factor receptor Intrinsic factor-

cobalamin receptor Intrinsic factor-vitamin B12 receptor

Function Cotransporter which plays a role in lipoprotein, vitamin and iron metabolism,

by facilitating their uptake. Binds to ALB, MB, Kappa and lambda-light chains, TF, hemoglobin, GC, SCGB1A1, APOA1, high density lipoprotein, and the GIF-cobalamin complex. The binding of all ligands requires calcium. Serves as important transporter in several absorptive epithelia, including intestine, renal proximal tubules and embryonic yolk sac. Interaction with LRP2 mediates its trafficking throughout vesicles and facilitates the uptake of specific ligands like GC, hemoglobin, ALB, TF and SCGB1A1. Interaction with AMN controls its trafficking to the plasma membrane and facilitates endocytosis of ligands. May play an important role in the development of the peri-implantation embryo through internalization of APOA1 and cholesterol.

Binds to LGALS3 at the maternal-fetal interface.

Sequence and Domain Family The CUB domains 5 to 8 mediate binding to GIF and ALB. CUB domains 1

and 2 mediate interaction with LRP2.

Cellular Localization Apical cell membrane Cell membrane Membrane, coated pit Endosome

Lysosome membrane. Colocalizes with AMN and LRP2 in the endocytotic

apparatus of epithelial cells.

Post-translational

Modifications

The precursor is cleaved by a trans-Golgi proteinase furin. The result is a

propeptide cleaved off. N-glycosylated.

St John's Laboratory Ltd

F +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com