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Rabbit Anti-COPT2 antibody

SL10622R

Product Name:	COPT2
Chinese Name:	COPT2抗体
Alias:	AI604396; Copper transporter 2; COPT2; COPT2_HUMAN; CTR2; hCTR2; MGC117640; Probable low affinity copper uptake protein 2; RP23 64F17.2; SLC31A2; Solute carrier family 31 member 2; Solute carrier family 31, member 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	21kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human COPT2:
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The activity of a diverse subset of enzymes relies on the essential nutrient copper to perform important processes including signaling to the transcription and protein trafficking machinery, oxidative phosphorylation, iron mobilization, neuropeptide maturation, and normal development. Copper uptake requires tight regulation to ensure that sufficient copper is present in the cell to drive vital cellular processes, while

avoiding the accumulation of copper to toxic levels. The copper transporter 2 (COPT2), also designated CTR2 or Solute carrier family 31 member 2 (SLC31A2), is a 143 amino acid protein mediates the uptake of copper in mammalian cells. COPT2 has been shown to localize to the plasma membrane, endosomes and lysosomes, where it plays a role in maintaining copper homeostasis. COPT2 also mediates the uptake of the chemotherapeutic drugs cisplatin and carboplatin and may modulate the sensitivity and toxicity of these drugs.

Function:
Involved in low-affinity copper uptake (Potential).

Subcellular Location:
Membrane; Multi-pass membrane protein (Probable).

Tissue Specificity:
Ubiquitous.

Post-translational modifications:
O-Glycosylation at Thr-27 protects from proteolytic cleavage in the N-terminal extracellular domain.

Similarity:
Belongs to the copper transporter (Ctr) (TC 1.A.56) family. SLC31A subfamily.

SWISS:
O15432

Gene ID:
1318

Database links:

Entrez Gene: 1318Human

Entrez Gene: 20530Mouse

Omim: 603088Human

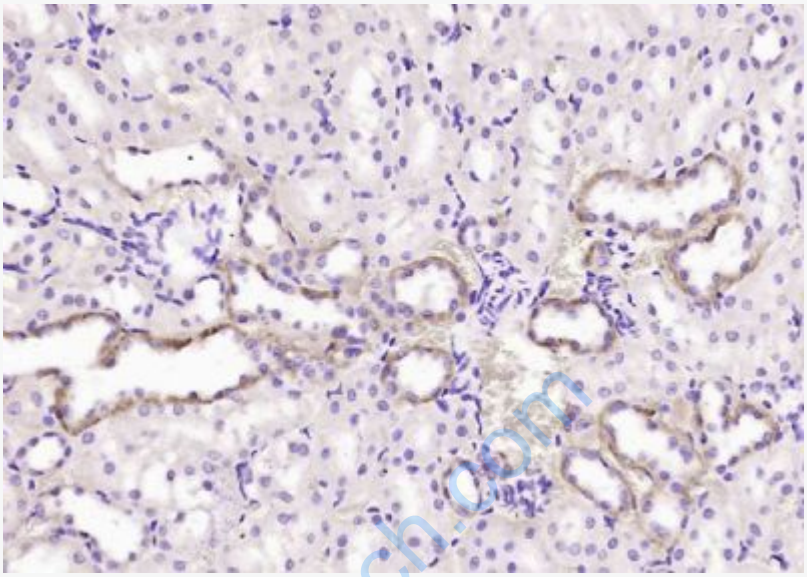
SwissProt: O15432Human

SwissProt: Q9CPU9Mouse

Unigene: 24030Human

Unigene: 292539Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human,

	therapeutic or diagnostic applications.
Picture:	 Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (COPT2) Polyclonal Antibody, Unconjugated (SL10622R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.