

**CTNS Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP55022**

**Specification**

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**CTNS Polyclonal Antibody - Product Information**

Application	<b>WB, IHC-P, IHC-F, IF, ICC, E</b>
Primary Accession	<a href="#">O60931</a>
Reactivity	<b>Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>41738</b>

**CTNS Polyclonal Antibody - Additional Information**

**Gene ID** 1497

**Other Names**

Cystinosin, CTNS {ECO:0000303|PubMed:9537412, ECO:0000312|HGNC:HGNC:2518}

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

**CTNS Polyclonal Antibody - Protein Information**

**Name** CTNS {ECO:0000303|PubMed:9537412, ECO:0000312|HGNC:HGNC:2518}

**Function**

Cystine/H(+) symporter that mediates export of cystine, the oxidized dimer of cysteine, from lysosomes (PubMed: <a href="http://www.uniprot.org/citations/11689434" target="\_blank">11689434</a>, PubMed: <a href="http://www.uniprot.org/citations/15128704" target="\_blank">15128704</a>, PubMed: <a href="http://www.uniprot.org/citations/18337546" target="\_blank">18337546</a>, PubMed: <a href="http://www.uniprot.org/citations/22232659" target="\_blank">22232659</a>, PubMed: <a href="http://www.uniprot.org/citations/29467429" target="\_blank">29467429</a>, PubMed: <a href="http://www.uniprot.org/citations/33208952" target="\_blank">33208952</a>, PubMed: <a href="http://www.uniprot.org/citations/36113465" target="\_blank">36113465</a>). Plays an important role in melanin synthesis by catalyzing cystine export from melanosomes, possibly by inhibiting pheomelanin synthesis (PubMed: <a href="http://www.uniprot.org/citations/22649030" target="\_blank">22649030</a>). In addition to cystine export, also acts as a positive regulator of mTORC1 signaling in kidney proximal tubular cells, via interactions with components of the v-ATPase and Ragulator complexes (PubMed: <a href="http://www.uniprot.org/citations/36113465" target="\_blank">36113465</a>). Also involved in small GTPase-regulated vesicle trafficking and lysosomal localization of LAMP2A, independently of cystine transporter activity (By similarity).

**Cellular Location**

[Isoform 1]: Lysosome membrane; Multi-pass membrane protein. Melanosome membrane; Multi-pass membrane protein. Note=AP-3 complex is required for localization to the lysosome.

**Tissue Location**

Strongly expressed in pancreas, kidney (adult and fetal), skeletal muscle, melanocytes and keratinocytes (PubMed:22649030). Expressed at lower levels in placenta and heart Weakly expressed in lung, liver and brain (adult and fetal) (PubMed:22649030).

**CTNS Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CTNS Polyclonal Antibody - Images**