

# CTBS Rabbit pAb

Catalog # AP98573

## Product Information

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| <b>Application</b>             | IHC-P, IHC-F, IF, E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Primary Accession</b>       | <a href="#">Q01459</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Other Accession</b>         | <a href="#">Q01459</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated MW</b>           | 43760                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human CTBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Epitope Specificity</b>     | 1-100/385                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>SIMILARITY</b>              | Belongs to the glycosyl hydrolase 18 family.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Background Descriptions</b> | CTBS is an evolutionarily conserved member of the glycosyl hydrolase 18 family of proteins. Localizing to the lysosome, CTBS plays a role in the degradation of asparagine-linked (Asn-linked) glycoproteins. Glycoproteins are translocated to lysosomes via endocytosis or autophagy where they are broken down by proteases and glycosidases. The catabolism of glycoproteins is an important step in the regular turnover of cellular contents and in maintaining the homeostasis of glycosylation. CTBS functions as a glycosidase that cleaves the reducing end GlcNAc from the core chitobiase unit of oligosaccharides. Before this reaction can occur, AGA (the lysosomal glycosylasparaginase) must first remove the Asn from the Asn-linked glycoprotein to expose the reducing end GlcNAc, thereby allowing CTBS to access the exposed moiety. |

## Additional Information

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| <b>Gene ID</b>     | 1486                                                                                                                                                                                            |
| <b>Other Names</b> | DIAC_HUMAN; CTBS; 3.2.1.-; CTB; chitobiase; chitobiase, di-N-acetyl-; di-N-acetylchitobiase                                                                                                     |
| <b>Dilution</b>    | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500<br>0-10000                                                                                                            |
| <b>Storage</b>     | 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. |

## Protein Information

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| <b>Name</b>              | CTBS ( <a href="#">HGNC:2496</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>          | CTB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Function</b>          | Reducing-end exoglycosidase involved in glycan degradation (PubMed: <a href="#">1527079</a> , PubMed: <a href="#">16115860</a> ). Hydrolyzes N,N'-diacetylchitobiose (GlnNAc <sub>2</sub> ) and higher chitin-oligosaccharides (GlcNAc(n)) to monomeric GlcNAc acting on reducing-end residues (PubMed: <a href="#">1527079</a> , PubMed: <a href="#">16115860</a> , PubMed: <a href="#">16794344</a> ). During N-linked glycoprotein degradation, it cleaves single GlcNAc molecules uniquely from the reducing end of N,N'-diacetylchitobiose units linking oligosaccharides to proteins, and therefore it functions after cleavage of the Asn- GlcNAc bond and asparagine removal by glycosylasparaginase (By similarity). |
| <b>Cellular Location</b> | Lysosome {ECO:0000250   UniProtKB:Q01460}.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.