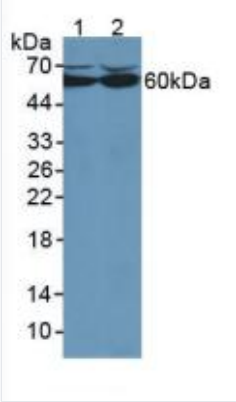
# Catalase (CAT) Antibody – Rabbit Polyclonal

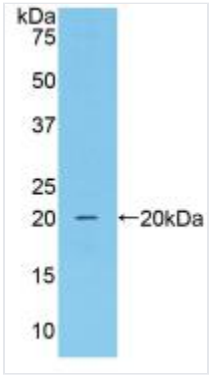
## PRODUCT OVERVIEW

| | |
|---|---|
| **Product Name** | Catalase (CAT), Polyclonal Antibody |
| **Full Product Name** | Polyclonal Antibody to Catalase (CAT) |
| **Product Gene Name** | anti-CAT antibody |
| **Immunogen Sequence** | Antigen: The target protein is fused with N-terminal His-Tag and its sequence is listed below. MGHHHHHHSG SEF- G AFGYFEVTHD ITRYSKAKVF EHIGKRTPIA VRFSTVTGES GSADTVRDPR GFAVKFYTED GNWDLVGNNT PIFFIRDAIL FPSFIHSQKR NPQTHLKDPD MVWDFWSLRP ESLHQVSFLF SDRGIPDGHR HMNGYGSHTF KLVNADGEAV YCKFHYKTD |
| **Clonality** | Polyclonal |
| **Host** | Rabbit |
| **Species Reactivity** | Mouse, Human, Rat |
| **Form/Format** | Supplied as solution form in PBS, pH7.4, containing 0.02% NaN3,50% glycerol. |
| **Purity/Purification** | Affinity Chromatography |
| **Concentration** | 500ug/mL (lot specific) |
| **Specificity** | The antibody is a rabbit polyclonal antibody raised against CAT. It has been selected for its ability to recognize CAT in immunohistochemical staining andwestern blotting. |
| **Preparation and Storage** | Store at 4 degree C for frequent use. Stored at -20 degree C to -80 degree C in a manual defrost freezer for one year without detectable loss of activity. Avoid repeated freeze-thaw cycles. |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>Biotin Conjugated Antibody: CAT (MBS2004620) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>Immunogen: CAT (MBS2011573) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>FITC Conjugated Antibody: CAT (MBS2014923) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>APC-CY7 Conjugated Antibody: CAT (MBS2065542) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>PE Conjugated Antibody: CAT (MBS2065544) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>APC Conjugated Antibody: CAT (MBS2065546) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>Cy3 Conjugated Antibody: CAT (MBS2065548) |
| **Matching Pairs** | Unconjugated Antibody: CAT (MBS2003879)<br>HRP Conjugated Antibody: CAT (MBS2065551) |
| **Matching Pairs** | Unconjugated Antibody: Catalase (CAT) (MBS2003879)<br>APC-CY7 Conjugated Secondary Antibody: Immunoglobulin G (MBS2090675) |
| **Matching Pairs** | Unconjugated Antibody: Catalase (CAT) (MBS2003879)<br>Unconjugated Secondary Antibody: Immunoglobulin G (MBS2090678) |
| **Molecular Weight** | 59,795 Da |

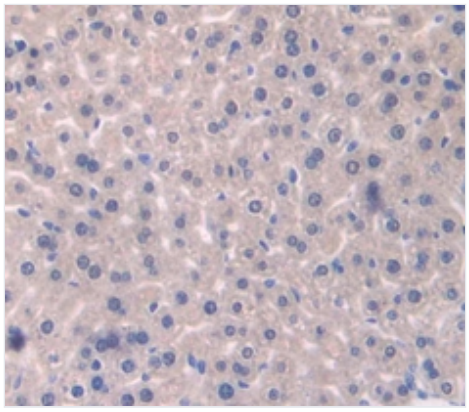
| | |
|---|---|
| **3D Structure** | ModBase 3D Structure for P24270 |
| **Supply Chain Verification** | Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire. |
| **Immunogen** | Recombinant CAT (Gly80~Asp239) expressed in E.coli. |
| **Cross Reactivity** | Human, Mouse |
| **Conjugated Antibody** | The APC conjugated antibody version of this item is also available as catalog #MBS2065546 |
| **ISO Certification** | Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory. |
| **Applications Tested/Suitable for anti-CAT antibody** | Immunocytochemistry (ICC), Immunohistochemistry (IHC) - Formalin/Paraffin, ELISA (EIA), Western Blot (WB) |
| **Application Notes for anti-CAT antibody** | Western blotting: 1:100-400<br>Immunocytochemistry in formalin fixed cells: 1:100-500<br>Immunohistochemistry in formalin fixed frozen section: 1:100-500<br>Immunohistochemistry in paraffin section: 1:50-200<br>Enzyme-linked Immunosorbent Assay: 1:100-200 |
| **Related Product Information for anti-CAT antibody** | MBS2003879 is an antibody targeting CAT. Also known as Polyclonal Antibody to Catalase (CAT). Reactive in Mouse, Human, Rat. Host: Rabbit. |
| **Other Notes** | Small volumes of anti-CAT antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |




**Western Blot (WB) of anti-CAT antibody**
Western Blot: Sample: Lane1: Human HepG2 Cells; Lane2: Human Hela Cells.




**Western Blot (WB) of anti-CAT antibody**
Western Blot: Sample: Recombinant CAT, Mouse.



**Immunohistochemistry (IHC) of anti-CAT antibody**
DAB staining on IHC-P. Samples: Mouse Tissue)

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CAT. It may not necessarily be applicable to this product.

| | |
|---|---|
| **NCBI GI #** | 157951741 |
| **NCBI GeneID** | 12359 |
| **NCBI Accession #** | NP_033934.2 |
| **UniProt Primary Accession #** | P24270 |
| **UniProt Secondary Accession #** | Q3TXQ6 |
| **UniProt Related Accession #** | P24270 |
| **GenBank Nucleotide #** | NM_009804.2 |
| **NCBI Official Full Name** | catalase |
| **NCBI Official Synonym Full Names** | catalase |
| **NCBI Official Symbol** | Cat |
| **NCBI Official Synonym Symbols** | Cas1; Cs-1; Cas-1; 2210418N07 |
| **UniProt Protein Name** | Catalase |
| **UniProt Gene Name** | Cat |
| **UniProt Synonym Gene Names** | Cas-1; Cas1 |
| **NCBI Protein Information** | catalase |
| **UniProt Comments for CAT** | Catalase: Occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic effects of hydrogen peroxide. Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells. Homotetramer. Belongs to the catalase family.<br><br>Protein type: Amino Acid Metabolism - tryptophan; Apoptosis; EC 1.11.1.6; Endoplasmic reticulum; Energy Metabolism - methane; Hydrolase; Mitochondrial; Oxidoreductase<br><br>Chromosomal Location of Human Ortholog: 2 E2\|2 54.43 cM<br><br>Cellular Component: cytosol; endoplasmic reticulum; extracellular exosome; extracellular space; focal adhesion; Golgi apparatus; intracellular membrane-bound organelle; lysosome; membrane; mitochondrial intermembrane space; mitochondrion; peroxisomal membrane; peroxisome; plasma membrane<br><br>Molecular Function: aminoacylase activity; antioxidant activity; catalase activity; enzyme binding; heme binding; metal ion binding; NADP binding; oxidoreductase activity; oxidoreductase activity, acting on peroxide as acceptor; peroxidase activity; protein homodimerization activity; receptor binding<br><br>Biological Process: aerobic respiration; cholesterol metabolic process; hemoglobin metabolic process; hydrogen peroxide catabolic process; kidney development; negative regulation of apoptosis; negative regulation of NF-kappaB transcription factor activity; osteoblast differentiation; positive regulation of cell division; positive regulation of NF-kappaB transcription factor activity; positive regulation of phosphoinositide 3-kinase cascade; protein homotetramerization; protein tetramerization; response to hydrogen peroxide; response to hypoxia; response to oxidative stress; response to reactive oxygen species; triacylglycerol metabolic process; ureteric bud development; UV protection |
| **Research Articles on CAT** | **1.** Data indicate that alpha-syntrophin plays an important role in the regulation of oxidative stress from endogenously generated reactive oxygen species (ROS) during myoblast differentiation by modulating the protein stability of catalase. |
| **Precautions** | All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines. |

| | |
|---|---|
| **Disclaimer** | While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice.<br><br>It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information. |
| **Product Note** | Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details. |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures.

**MyBioSource** | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/catalase-cat/2003879