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-20°C

#14097

Catalase (D5N7V) Rabbit mAb

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orders@cellsignal.comEntrez-Gene ID #847
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New 09/14

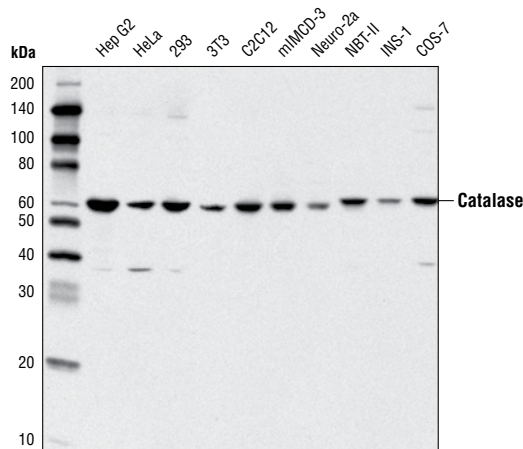
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Applications W Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 60 kDa	Isotype Rabbit IgG**
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Background: Catalase catalyzes the conversion of hydrogen peroxide to water and oxygen (1). Research studies show that overexpression of this antioxidant enzyme increases the ability of pancreatic β -cells to scavenge reactive oxygen species (ROS), thereby protecting pancreatic β -cells from oxidative stress (2). The pancreatic β -cells overexpressing this enzyme are also protected from hydrogen peroxide-mediated lipotoxicity, providing further evidence for the importance of catalase in the pathogenesis of diabetes (3).

Specificity/Sensitivity: Catalase (D5N7V) Rabbit mAb recognizes endogenous levels of total catalase protein. This antibody may also cross-react with an unidentified protein of approximately 35 kDa.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp128 of human catalase protein.



Western blot analysis of extracts from various cell lines using Catalase (D5N7V) Rabbit mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

Background References:

- (1) Chelikani, P. et al. (2004) *Cell Mol Life Sci* 61, 192-208.
- (2) Chen, H. et al. (2005) *Diabetes* 54, 1437-46.
- (3) Elsner, M. et al. (2011) *Diabetes* 60, 200-8.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig S—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.