Product Name: **KD-Validated Superoxide Dismutase 2 Recombinant Rabbit Monoclonal Antibody**

Catalog #: **KVAb00865**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 24.8kDa

Antigen Information

Gene Name	SOD2
Alternative Names	SOD2; Superoxide Dismutase 2; GClnc1; MnSOD; IPOB; GC1; Superoxide Dismutase [Mn], Mitochondrial; Superoxide Dismutase 2, Mitochondrial; EC 1.15.1.1; Epididymis Secretory Sperm Binding Protein; Manganese-Containing Superoxide Dismutase; Gastric Cancer–Associated LncRNA 1; Gastric Cancer-Associated LncRNA 1; Manganese Superoxide Dismutase; Mangano-Superoxide Dismutase; Mn Superoxide Dismutase; Indophenoloxidase B; Mn-SOD; IPO-B; MVCD6
Gene ID	6648.0
SwissProt ID	P04179
Immunogen	A synthesized peptide derived from human SOD2

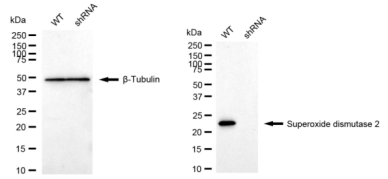
Background

This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1. [provided by RefSeq, Apr 2016]

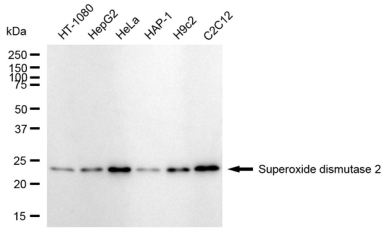
Research Area

Cell Biology,Signal Transduction,Neuroscience,Cancer,Metabolism,Cardiovascular

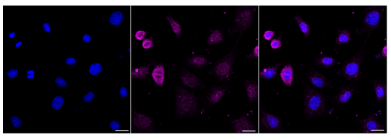
Image Data



Western blotting analysis using Superoxide dismutase 2 antibody (KVAb00865). Superoxide dismutase 2 expression in wild type (WT) and Superoxide dismutase 2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Superoxide dismutase 2 antibody (KVAb00865, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Superoxide dismutase 2 antibody (KVAb00865). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Superoxide dismutase 2 antibody (KVAb00865, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of C2C12 cells with Superoxide dismutase 2 antibody (KVAb00865, 1:1,000) . Nuclei were stained blue with DAPI; Superoxide dismutase 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: Low. Scale bar, 20 µm.