



SOD2 Rabbit mAb

Catalog No	YP-rAb-17940
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	SOD2
Protein Name	Superoxide dismutase [Mn] mitochondrial
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	SOD2;Superoxide dismutase [Mn] mitochondrial;SOD2 ; Superoxide dismutase [Mn], mitochondrial
Observed Band	22kD
Calculated Molecular Weight	25kD
Cell Pathway	Mitochondrion matrix
Tissue Specificity	Brain,Colon,Heart,Liver,Lung,Mammary carcinoma,Tongue,
Function	Catalytic activity:2 superoxide + 2 H(+) = O(2) + H(2)O(2).,cofactor:Binds 1 manganese ion per subunit.,Disease:Genetic variation in SOD2 is associated with susceptibility to diabetic nephropathy [MIM:612634]; also called susceptibility to microvascular complications of diabetes type 6 (MVCD6). Diabetic nephropathy is a kidney disease and resultant kidney function impairment due to the long standing effects of diabetes on the microvasculature (glomerulus) of the kidney . Features include increased urine protein and declining kidney function.,Function:Destroys radicals which are normally produced within the cells and which are toxic to biological systems.,online information:Superoxide dismutase entry,online information:The Singapore human mutation and polymorphism database,PTM:Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.,similarity:Belongs to the iron/manganese superoxide dismutase family.,subunit:Homotetramer.,



Background

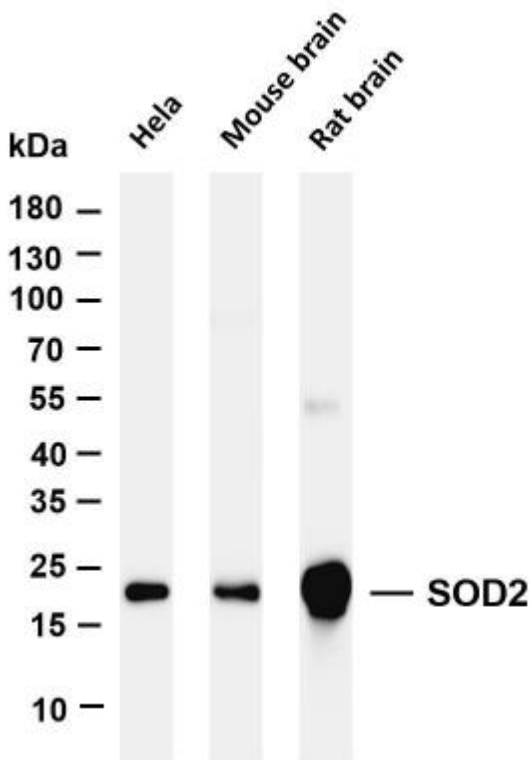
This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic 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],

matters needing attention

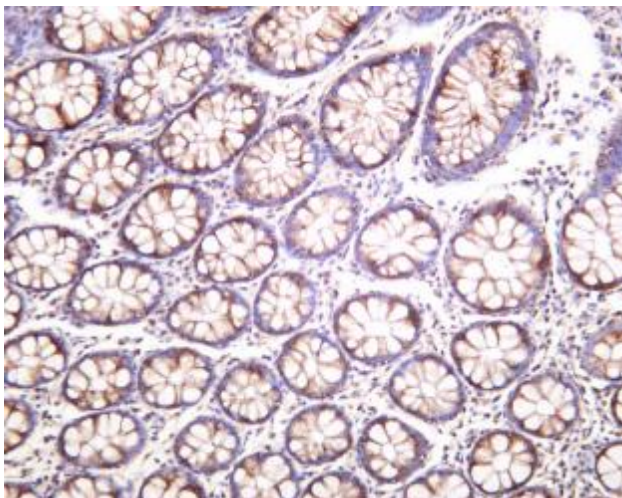
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

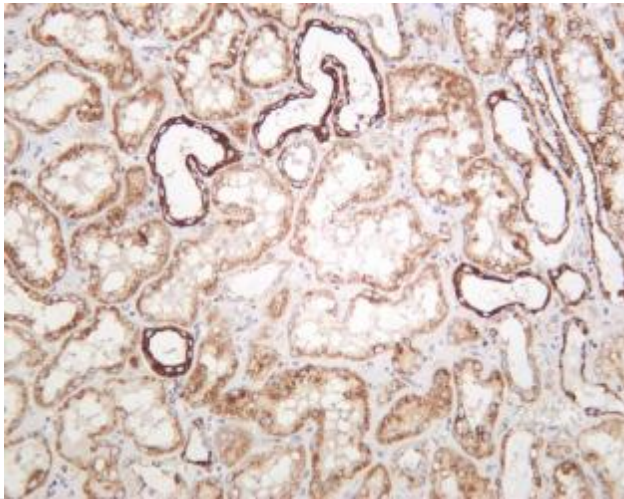


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SOD2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: Mouse brain Lane 3: Rat brain Predicted band size: 25kDa Observed band size: 22kDa

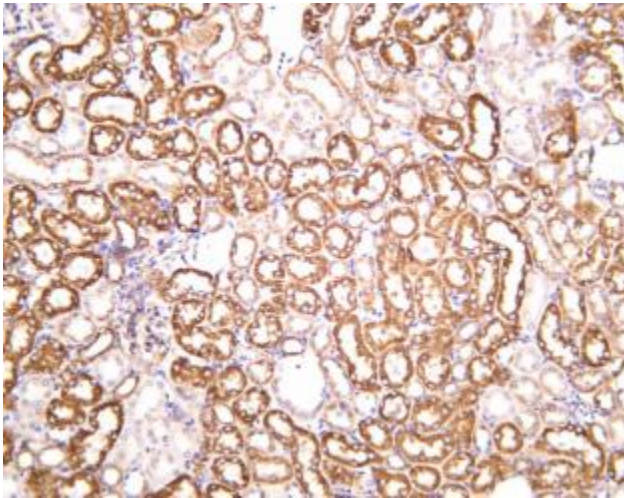


Human colon was stained with anti-SOD2 rabbit antibody

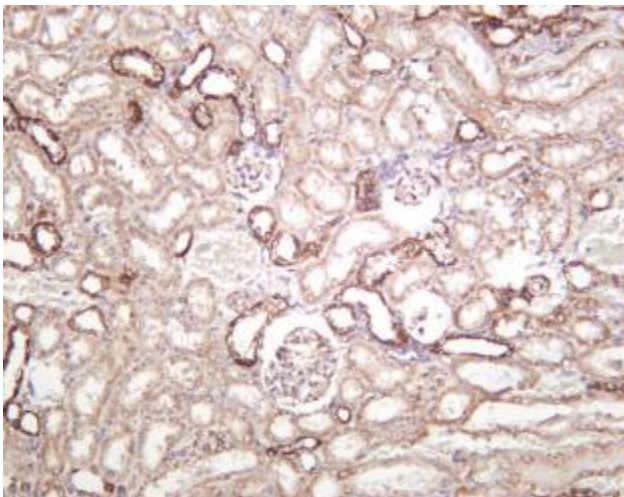




Human kidney was stained with anti-SOD2 rabbit antibody



Mouse kidney was stained with anti-SOD2 rabbit antibody



Rat kidney was stained with anti-SOD2 rabbit antibody

