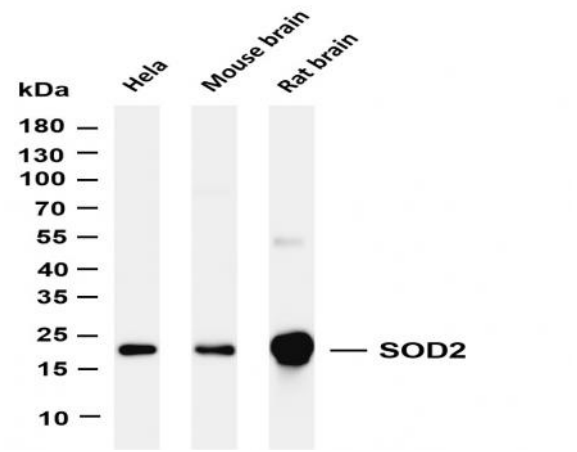
Best Tools for immunology Research

SOD2 (PT0085R) PT® Rabbit mAb

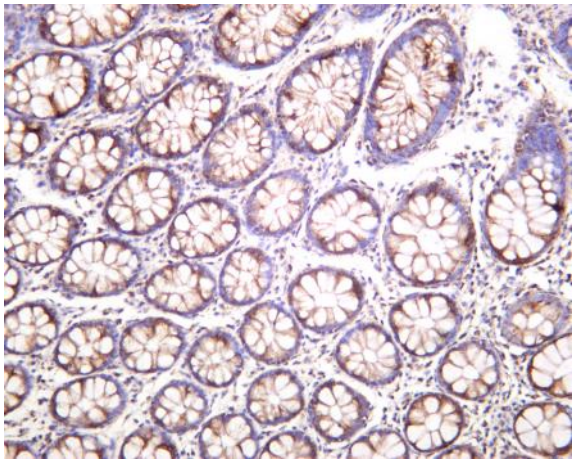
Catalog No :	YM8048
Reactivity :	Human; Mouse; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Target :	SOD2
Fields :	>>FoxO signaling pathway;>>Peroxisome;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Huntington disease;>>Chemical carcinogenesis - reactive oxygen species;>>Lipid and atherosclerosis
Gene Name :	SOD2
Protein Name :	Superoxide dismutase [Mn] mitochondrial
Human Gene Id :	6648
Human Swiss Prot No :	P04179
Mouse Gene Id :	20656
Mouse Swiss Prot No :	P09671
Rat Gene Id :	24787
Rat Swiss Prot No :	P07895
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:200-1:1000,WB 1:1000-1:5000,IF 1:200-1:1000,ELISA 1:5000-1:20000,IP 1:50-1:200,

Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	25kD
Observed Band :	22kD
Cell Pathway :	Huntington's disease;
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],
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:Belo
Subcellular Location :	Mitochondrion matrix
Expression :	Brain,Colon,Heart,Liver,Lung,Mammary carcinoma,Tongue,

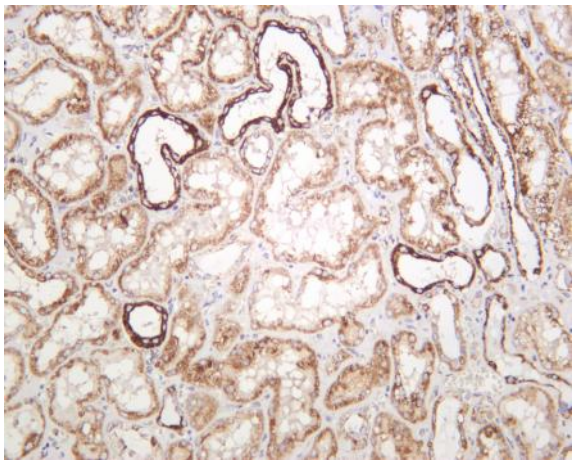
Products Images



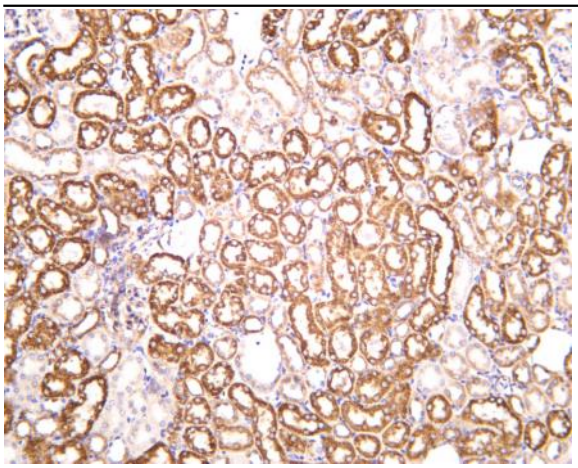
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SOD2 (PT0085R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: Mouse brain Lane 3: Rat brain Predicted band size: 25kDa Observed band size: 22kDa



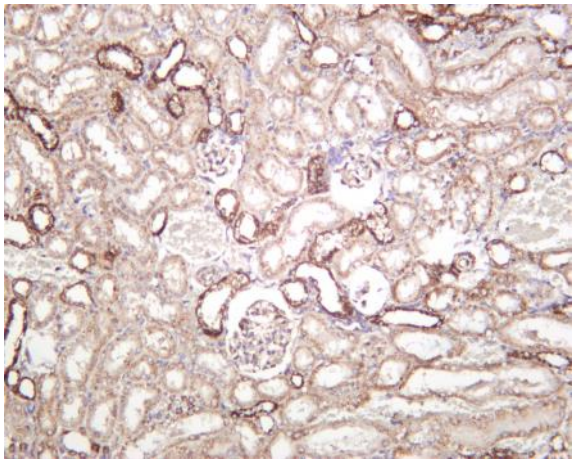
Human colon was stained with anti-SOD2 (PT0085R) rabbit antibody



Human kidney was stained with anti-SOD2 (PT0085R) rabbit antibody



Mouse kidney was stained with anti-SOD2 (PT0085R) rabbit antibody



Rat kidney was stained with anti-SOD2 (PT0085R) rabbit antibody