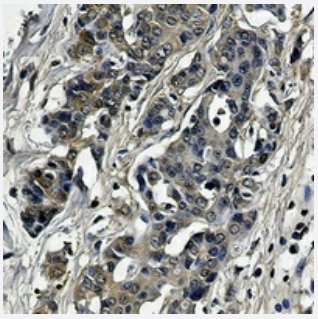
RecomAb™ Sm Size

SOD1 recombinant monoclonal antibody

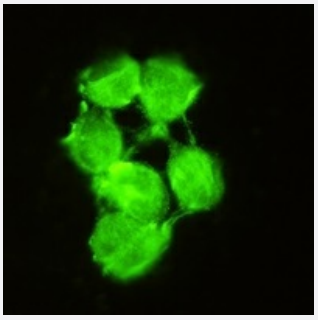
Catalog # RAB09282 Size 50 uL

Applications



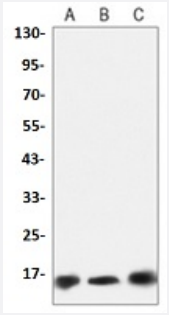
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human breast carcinoma formalin fixed paraffin embedded tissue section using SOD1 recombinant monoclonal antibody (Cat # RAB09282). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.26). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescence

Immunofluorescent analysis of HCT116 cells with SOD1 recombinant monoclonal antibody (Cat # RAB09282). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.



Western Blot (Cell lysate)

Western blot analysis of A549 (A), HL60 (B), C6 (C) whole cell lysates with SOD1 recombinant monoclonal antibody (Cat # RAB09282).

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Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human SOD1.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide of human SOD1.
Theoretical MW (kDa)	16
Reactivity	Human, Rat
Specificity	Recognizes endogenous levels of SOD1 protein.
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Immunogen affinity chromatography
Isotype	IgG
Recommend Usage	Immunocytochemistry (1:50-1:100) Immunofluorescence (1:50-1:100) Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:1000)
Storage Buffer	In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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- Immunofluorescence

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Gene Info — SOD1

Entrez GeneID	6647
Protein Accession#	P00441
Gene Name	SOD1
Gene Alias	ALS, ALS1, IPOA, SOD, homodimer
Gene Description	superoxide dismutase 1, soluble
Omim ID	105400 147450
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene binds copper and zinc ions and is one of two isozymes respons ible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytopla smic protein, acting as a homodimer to convert naturally-occuring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutati ons in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare tra nscript variants have been reported for this gene. [provided by RefSeq
Other Designations	Cu /Zn superoxide dismutase|Cu/Zn superoxide dismutase|SOD, soluble|indophenoloxidase A|su peroxide dismutase, cystolic

Pathway

- Amyotrophic lateral sclerosis (ALS)
- Prion diseases

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Disease

- Acute Disease
- Albuminuria
- Alzheimer disease
- Amyotrophic lateral sclerosis
- Auditory Threshold
- Barrett Esophagus
- Birth Weight
- Brain Neoplasms
- Breast cancer
- Breast Neoplasms
- Carcinoma
- Cardiovascular Diseases
- Chronic Disease
- Cognition
- Cognition Disorders
- Coronary Artery Disease
- Dementia
- Diabetes Mellitus
- Diabetic Angiopathies
- Diabetic Nephropathies
- Diabetic Retinopathy
- Disease Progression
- DNA Damage
- Edema

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- Encephalitis
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Hearing Loss
- Hemorrhage
- Hepatitis
- Hypercholesterolemia
- Keratoconus
- Kidney Failure
- Leukemia
- Liver Cirrhosis
- Lung Neoplasms
- Lymphoma
- Meningeal Neoplasms
- Meningioma
- Motor Neuron Disease
- Multiple Sclerosis
- Nerve Degeneration
- Neuroblastoma
- Neuropsychological Tests
- Occupational Diseases
- Ovarian cancer
- Pre-Eclampsia
- Prostate cancer
- Prostatic Neoplasms

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- Pulmonary Disease
- Reaction Time
- Schizophrenia
- Schizophrenic Psychology
- Sensory Thresholds
- Urinary Bladder Neoplasms
- Urologic Diseases
- Weight Gain
- Werner syndrome

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