Datasheet for ABIN2484271

anti-SOD3 antibody (FITC)

2 Images

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Overview

Quantity:	100 µg
Target:	SOD3
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SOD3 antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	Human extracellular SOD purified from aortas
Clone:	4GG11G6
Isotype:	IgG1 kappa
Specificity:	Detects extracellular SOD ~35 kDa.
Cross-Reactivity:	Guinea Pig, Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	SOD3
Alternative Name:	SOD3 (SOD3 Products)

Target Details

Background:	Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme present in almost every cell in the body (3). It works by catalyzing the dismutation of the superoxide radical $O2^-$ to O2 and H2O2, which are then metabolized to H2O and O2 by catalase and glutathione peroxidase (2, 5). In general, SODs play a major role in antioxidant defense mechanisms (4). There are three types of SOD in mammalian cells. One form (SOD1) contains Cu and Zn ions as a homodimer and exists in the cytoplasm. The two subunits of 16 kDa each are linked by two cysteines forming an intra-subunit disulphide bridge (3). The second form (SOD2) is a manganese containing enzyme and resides in the mitochondrial matrix. It is a homotetramer of 80 kDa. The third form (SOD3 or EC-SOD) is like SOD1 in that it contains Cu and Zn ions, however it is distinct in that it is a homotetramer, with a mass of 30 kDA and it exists only in the extra-cellular space (6). SOD3 can also be distinguished by its heparin-binding capacity (1).
Gene ID:	6649
NCBI Accession:	NP_003093
UniProt:	P08294

Application Details

Application Notes:	• WB (1:1000) • IHC (1:100) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN2484271 was sufficient for detection of EC-SOD in 20 µg of human cartilage lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

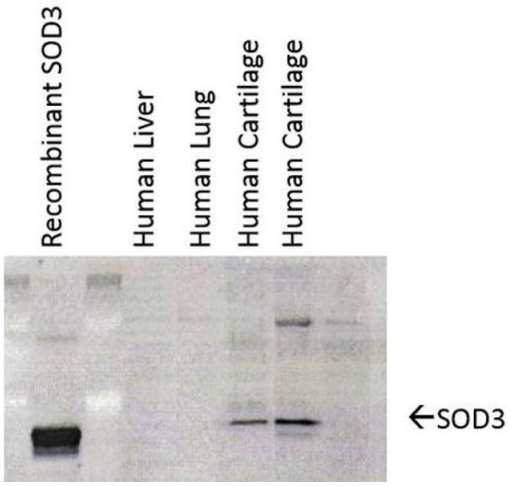
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



Western Blotting

Image 1. Western Blot analysis of Human cartilage lysates showing detection of SOD3 protein using Mouse Anti-SOD3 Monoclonal Antibody, Clone 4GG11G6 . Primary Antibody: Mouse Anti-SOD3 Monoclonal Antibody at 1:1000. Left: Control, Middle: Young cartilage, Right: Cartilage sample with osteoarthritis-arthritis..

Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SOD3 Monoclonal Antibody, Clone 4GG11G6 . Tissue: cartilage. Species: Human. Primary Antibody: Mouse Anti-SOD3 Monoclonal Antibody at 1:1000.