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Built Around Immunology

Anti-SOD2 Rabbit mAb [13B91]

Catalog No.: A52313

Basic Information

Catalog No. (Cat.No.)	A52313
Host species	Rabbit
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Synonyms	SOD2,Manganese superoxide dismutase,MnSOD,SODM,ALS8

Product Information

Target	SOD2
Molecular Weight(Calculated)	25 kDa
Molecular Weight(Observed)	22 kDa
Isotype	IgG,Kappa
Conjugation	NA
Concentration	0.2 mg/ml
Clonality	Monoclonal
Clone No.	13B91
RRID	NA
Storage buffer	50% Glycerol, 0.05% BSA and 0.05% preservative in PBS (pH 7.2-7.4)
Storage	Stored at -20°C for 1 year. Avoid repeated freeze / thaw cycles.
Shipped at conditions	Frozen
Form	Liquid

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Product Usage Information

Application	Dilution
WB	1:1000-1:5000
IHC	1:200-1:1000
IF	1:200-1:1000
ELISA	1:5000-1:20000

Target Information

Protein Name	Superoxide dismutase-2, mitochondrial
Gene Name	*SOD2*
Domain	NA
Background	SOD2 (Superoxide dismutase 2, Mn-SOD) is manganese-dependent mitochondrial superoxide dismutase localized in mitochondrial matrix, responsible for scavenging respiratory-chain-derived superoxide radicals and preserving mitochondrial redox homeostasis. Using manganese co-factor, SOD2 detoxifies matrix superoxide and shields mitochondrial DNA and respiratory complexes from oxidative damage as key mitochondrial antioxidant enzyme. SOD2 down-regulation amplifies oxidative stress and contributes to ageing, inflammation and cardiovascular disorders. SOD2 exerts dual roles in malignancies: insufficient SOD2 aggravates oxidative damage while moderate up-regulation confers tumour-cell resistance against ROS stress.