

Product datasheet for **TA326596**

Sod2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	0.5ug/ml was sufficient for detection of Mn SOD in 20ug of rat brain tissue extract
Reactivity:	Human, Rat, Mouse, Bovine, Canine, Chicken, Guinea Pig, Pig, Hamster, Rabbit, Monkey, Sheep, Xenopus, Drosophila
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Rat Mn SOD
Formulation:	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Concentration:	lot specific
Purification:	Affinity (antigen) Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	superoxide dismutase 2, mitochondrial
Database Link:	NP_058747 Entrez Gene 6648 Human Entrez Gene 20656 Mouse Entrez Gene 574097 Monkey Entrez Gene 24787 Rat P07895



[View online »](#)

Background:

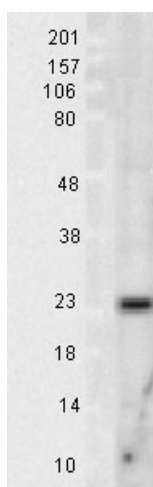
Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme present in almost every cell in the body . It works by catalyzing the dismutation of the superoxide radical O_2^- to O_2 and H_2O_2 , which are then metabolized to H_2O and O_2 by catalase and glutathione peroxidase . In general, SODs play a major role in antioxidant defense mechanisms . There are two main 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 . 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 . SOD3 can also be distinguished by its heparin-binding capacity .

Synonyms:

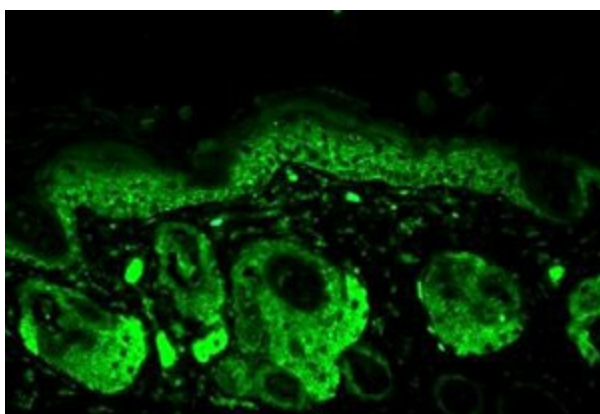
IPO-B; Mn-SOD; MNSOD; MVCD6

Note:

Detects a ~25kDa protein corresponding to the molecular mass of Mn superoxide dismutase (SOD) on SDS PAGE immunoblots.

Product images:

Western blot analysis of Mn SOD in rat tissue lysates, using a 1:1000 dilution of the antibody



Mn SOD visualized using the antibody