

Product Datasheet

SOD1 (UbetaB) Antibody (HRP) (orb152256)

Catalog Number	orb152256
Category	Antibodies
Description	Rabbit polyclonal to SOD1 (HRP). 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 (1,4). 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. Misfolding of SOD1 has been implicated in Amyotrophic lateral sclerosis (ALS). Therefore conformation specific antibodies such as Anti-SOD1 (U beta B), which targets an unfolded region of the beta barrel of SOD1, are useful for determining the conformation of SOD1 in affected tissues. This antibody can be used in conjunction with Anti-SOD1 (EDI) which detects an exposed dimer interface (EDI) of SOD1..
Target	SOD1 (UbetaB)
Clonality	Polyclonal
Species/Host	Rabbit
Conjugation	HRP
Reactivity	Human, Mouse, Rat
Concentration	1 mg/ml
Buffer/Preservatives	73.64mM Carbonate, 54.55mM Ethanolamine, 45.45mM Cyanoborohydride, 18.18mM Sodium Hydroxide, 0.23mM Citrate
Purification	Peptide Affinity purified

Biorbyt Ltd.

7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom

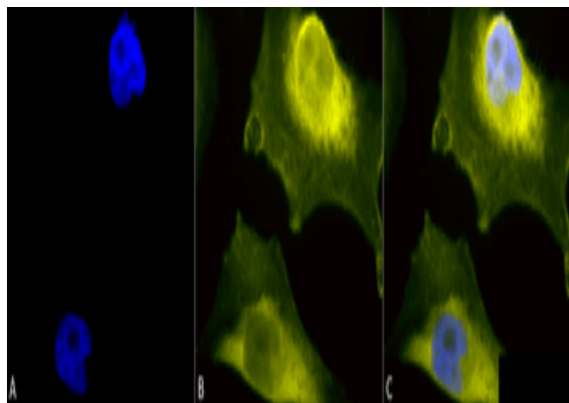
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC

68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713
United States

Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558

Immunogen	Within 50 AA of N-terminal region of SOD1, unfolded beta barrel region
UniProt ID	P00441
Tested applications	ELISA, ICC, IF, WB
Dilution range	WB (1:1000), ICC/IF (1:100)
Application notes	1µg/ml of SPC-205 was sufficient for detection of the unfolded beta barrel of SOD1 by colorimetric dot blot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.
Specificity	Recognizes a conformation specific epitope where the beta barrel is unfolded.
Storage	Conjugated antibodies should be stored according to the product label
Note	For research use only
Entrez	6647
NCBI	CAG46542



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-SOD1 (UBB) Polyclonal Antibody. Tissue: Cervical cancer cell line (HeLa). Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-SOD1 (UBB) Polyclonal Antibody at 1:110 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Nucleus. Mitochondrion. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-SOD1 (UBB) Antibody. (C) Composite.

Biorbyt Ltd.

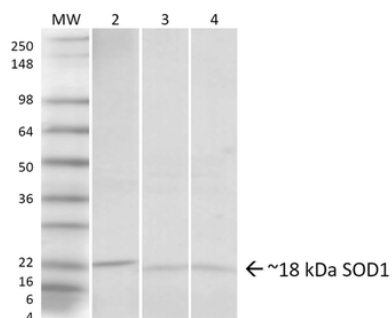
7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom

Email: info@biorbyt.com, support@biorbyt.com
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

Biorbyt LLC

68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713
United States

Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)



Western blot analysis of Human, Rat, Mouse HeLa cells, Brain, Lung showing detection of ~18 kDa SOD1 (UBB) protein using Rabbit Anti-SOD1 (UBB) Polyclonal Antibody. Lane 1: Molecular Weight Ladder. Lane 2: Human HeLa Cell Lysates. Lane 3: Rat Brain. Lane 4: Mouse Lung. Load: 20 µg. Primary Antibody: Rabbit Anti-SOD1 (UBB) Polyclonal Antibody at 1:1000. Predicted/Observed Size: ~18 kDa.

Biorbyt Ltd.

7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom

Email: info@biorbyt.com, support@biorbyt.com

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

Biorbyt LLC

68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713
United States

Email: info@biorbyt.com, support@biorbyt.com

Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)