

## **UK Office**

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# EB07208 - Goat Anti-SOD1 Antibody

Size: 100µg specific antibody in 200µl



# **Target Protein**

Principal Names: SOD1, superoxide dismutase 1, soluble (amyotrophic lateral sclerosis 1 (adult)), HGNC:11179, ALS, ALS1, IPOA, SOD, Cu/Zn superoxide dismutase, SOD, soluble, indophenoloxidase A, superoxide dismutase 1, soluble, superoxide dismutase, cystolic, HEL-S-44, hSod1, epididymis secretory protein Li 44 Official Symbol: SOD1 Accession Number(s): NP\_000445.1 Human GeneID(s): <u>6647</u> Non-Human GeneID(s): 20655 (mouse), 24786 (rat)

#### Immunogen

Peptide with sequence C-SRKHGGPKDEERH, from the internal region of the protein sequence according to NP\_000445.1.

Please note the peptide is available for sale.

# **Purification and Storage**

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

# **Applications Tested**

Peptide ELISA: antibody detection limit dilution 1:8000.

**Western blot:** Approx 18kDa band observed in Mouse Brain and Rat Spinal Cord lysates, and in lysates of cell line NIH3T3. Approx 20kDa observed in lysates of cell lines HEK293, HepG2 and MCF7 (calculated MW of 15.9kDa according to Human NP\_000445.1, Mouse NP\_035564.1 and Rat NP\_058746.1). Recommended concentration: 0.01-0.03µg/ml. Primary incubation 1 hour at room temperature. This antibody has been successfully used in Western blot on Mouse: Frazziano G et al. (2014) PMID: 24213612.

**Immunofluorescence:** Strong expression of the protein seen in the nucleus and cytoplasm of U2OS cells and the cytoplasm of A431 cells. Recommended concentration: 10µg/ml.

**Additional validation:** This antibody has been successfully used in the following paper: Sikorski et al. (2018) PMID: 30377371.

## **Species Reactivity**

Tested: Human, Mouse Expected from sequence similarity: Human, Mouse, Rat, Dog

# **Specific References**

#### This antibody has been successfully used in the following paper:

Krzysztof Sikorski, Adi Mehta, Marit Inngjerdingen, Flourina Thakor, Simon Kling, Tomas Kalina, Tuula A. Nyman, Maria Ekman Stensland, Wei Zhou, Gustavo A. De Souza, Lars Holden, Jan Stuchly, Markus Templin and Fridtjof Lund-Johansen A high-throughput pipeline for validation of antibodies Nat Methods. 2018 Nov;15(11):909-912 PMID: 30377371

#### This antibody has been successfully used in Western blot on Mouse:

Frazziano G, Al Ghouleh I, Baust J, Shiva S, Champion HC, Pagano PJ. Nox-derived ROS are acutely activated in pressure overload pulmonary hypertension: indications for a seminal role for mitochondrial Nox4. Am J Physiol Heart Circ Physiol. 2014 Jan 15;306(2):H197-205. PMID: 24213612 EB07208 (0.02µg/ml) staining of Mouse Brain lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

EB07208 (0.01µg/ml) staining of NIH3T3 (A), HEK293 (B), HepG2 (C) and MCF7 (D) lysates (35µg protein in RIPA buffer). Detected by chemiluminescence.

EB07208 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).

EB07208 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).