## DATASHEET

### Mouse anti-Misfolded Human SOD1 (B8H10)

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<th>Misfolded Human SOD1 antibody</th>
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### BACKGROUND INFORMATION

Superoxide dismutase 1 (SOD1) is a soluble cytoplasmic and mitochondrial intermembrane space protein. SOD1 binds copper and zinc ions and is one of three isozymes responsible for destroying free superoxide radicals in the body. Mutations in SOD1 cause familial amyotrophic lateral sclerosis type 1 (ALS1). These mutations have been linked to accumulation of harmful superoxide radicals, promotion of apoptosis, formation of aggregates of misfolded superoxide dismutase which are toxic and the continued stimulation of nerve cells that causes them to burn out and die.

### PRODUCT DESCRIPTION

A sensitive antibody against misfolded forms of hSOD1. The antibody is in a protein-free culture medium.

### FORMAT

250 µl of lyophilized antibody. **Reconstitute in 250 µl of distilled H2O.** It contains no additives.

### HOST

Mouse

### CLONALITY

Monoclonal

### ISOTYPE

IgG1

### REACTIVITY / SPECIFICITY

The antibody recognizes misfolded forms of mutant human SOD1 protein. IP: wt, G93A, D90A, G85R, G127X, and G37R; WB (denatured): wt, D90A, G85R, G127X and G37R; WB (native): G93A; IF: G93A, G85R, G127X and G37R; Flow Cytometry: G93A. **Specific for:** human, the antibody does not recognize the mouse protein; other species not tested.

### APPLICATIONS

Western Blot (WB), Immunoprecipitation (IP), Immunohistochemistry (IHC), Immunofluorescence (IF)

### RECOMMENDED STARTING DILUTIONS

If reconstituted in 250 µl: IF 1:50 to 1:500; WB 1:250; IP 6 µl / 40 µl (Protein G beads / 300 µg of protein lysate). Optimal dilution has to be determined by the user.

### STORAGE

Lyophilized antibody can be kept at 4°C for up to 3 months and should be kept at -20°C for long-term storage. To avoid freeze-thaw cycles, reconstituted antibody should be aliquoted before freezing for short-term storage (-20°C) or for long-term storage (-80°C). For maximum recovery of product, centrifuge the original vial prior to removing the cap. Further dilutions can be made in assay buffer.

### STABILITY

Minimum 1 year from reception date.

### REFERENCES


Candidate is Effective in a Mouse Model of Amyotrophic Lateral Sclerosis (ALS).
Chem Med Chem 10, 850-861.


LIMITATIONS
This product is to be used for research purposes only.

IMAGES
The spinal cord sections of transgenic mice SOD1G93A show the detection of misfolded SOD1 in the motor neurons. This immunodetection does not appear in the transgenic mice that reproduce normal human SOD1 (Tg-hWTov Sc).

MM-0070-P: 1:100