Superoxide Dismutase 1 (SOD1) Unfolded Beta Barrel Polyclonal Antibody

ORDERING INFORMATION

Catalog No.: 13065

Format: 100µg (1mg/ml) Protein A-purified antibody in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide.

BACKGROUND

Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme that catalyzes the dismutation of the superoxide radical O_2- to oxygen and hydrogen peroxide which are then metabolized to H_2O and O_2 by catalase and glutathione peroxidase. SODs play an important role in antioxidant defense mechanisms. SOD1 contains Cu and Zn ions and exists as a homodimer in cell cytoplasm. Each SOD1 monomer folds into an eight-stranded "Greek key" beta-barrel. These strands are connected by seven external loops. Misfolding of SOD1 has been implicated in Amyotrophic Lateral Sclerosis (ALS).

SPECIFICATION SUMMARY

Antigen: Synthetic peptide corresponding to unfolded beta barrel (UβB) region at the N-terminus of SOD1.

Accession no.: CAG46542, P00441

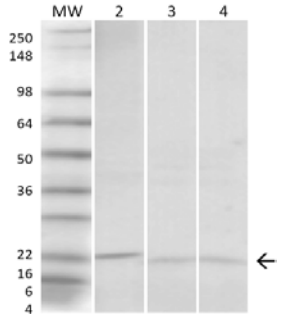
Gene ID: 6647

Host Species: Rabbit

Specificity: This antibody recognizes a conformation-specific epitope where the beta barrel is unfolded.

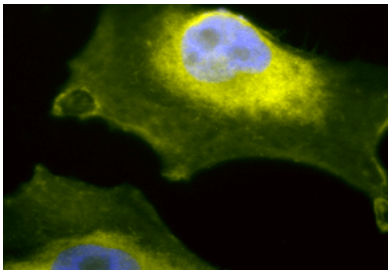
APPLICATIONS

Immunoblotting: use at 1ug/ml. A band of ~18kDa is detected.



Detection of SOD1 in (2) HeLa cell lysate, (3) rat brain lysate, and (4) mouse lung lysate with #13065 at 1ug/ml.

Immunofluorescence: use at 10ug/ml.



Detection of SOD1 in HeLa cells with #13065 at 10ug/ml. DAPI (blue) nuclear stain, FITC (green) SOD1 stain.

These are recommended concentrations. Endusers should determine optimal concentrations for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C.