Anti-SOD1 Antibody (8C907)

Product Details

Ig Type:	Mouse IgG2b
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	8C907
Purification:	Protein A

Applications

Verified Activity:

1. Flow cytometric analysis of Human SOD1 expression in HeLa cells. The cells were treated according to manufacturer's manual (BD Pharmingen™ Cat. No. 554714), and stained with Purified Mouse anti-SOD1, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.
2. Anti-SOD1 mouse monoclonal antibody at 1:500 dilution.
-Lane A: Jurkat Whole Cell Lysate.
-Lane B: Hela Whole Cell Lysate.
-Lane C: HepG2 Whole Cell lysate.
-Lysates/proteins at 30 µg per lane.
-Secondary
-Goat Anti-Mouse IgG H&L (Dylight800) at 1/15000 dilution.
-Developed using the Odyssey technique.
-Performed under reducing conditions.
-Predicted band size:16 kDa.
-Observed band size:20 kDa.
3. SOD1 was immunoprecipitated using:
-Lane A:0.5 mg Jurkat Whole Cell Lysate.
-Lane B:0.5 mg HepG2 Whole Cell Lysate
-0.5 µL anti-SOD1 mouse monoclonal antibody and 15 µl of 50 % Protein G agarose.
-Primary antibody:
-Anti-SOD1 mouse monoclonal antibody, at 1:500 dilution.
-Secondary antibody:
-Dylight 800-labeled antibody to Mouse IgG (H+L), at 1:7500 dilution.
-Developed using the odyssey technique.
-Performed under reducing conditions.
-Predicted band size: 16 kDa.
-Observed band size: 18 kDa

Application:	FCM,IP,WB
Recommended	WB: 1:500-1:1000; FCM: 1:100-1:500; IP: 0.2-1 μL/mg of lysate

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human SOD1 / Superoxide Dismutase protein (TMPY-01585)
Antigen Species:	Human
Synonyms:	SOD;ALS1;hSod1;HEL-S-44;ALS;homodimer;IPOA;superoxide dismutase 1, soluble

Research Background

SOD1 belongs to the Cu-Zn superoxide dismutase family. It binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occuring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene. SOD1 destroys radicals which are normally produced within the cells and which are toxic to biological systems. Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1). ALS1 is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of cases leading to familial forms.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481