PRODUCT DATA SHEET

Product: **Anti-Superoxide Dismutase 2 pAb**

Cat. No.: **PC-574 (100 µL)**

Description:
Superoxide dismutase (SOD) is an antioxidant enzyme involved in the defense system against reactive oxygen species (ROS). SOD catalyzes the dismutation reaction of superoxide radical anion (O2-) to hydrogen peroxide, which is then catalyzed to innocuous O2 and H2O by glutathione peroxidase and catalase. Several classes of SOD have been identified. These include intracellular copper, zinc SOD (Cu, Zn-SOD/SOD-1), mitochondrial manganese SOD (Mn-SOD/SOD-2) and extracellular Cu, Zn-SOD (EC-SOD/SOD-3). SOD-1 is found in all eukaryotic species as a homodimeric 32-kDa enzyme containing one each of Cu and Zn ion per subunit. The manganese containing 80-kDa tetrameric enzyme SOD2, is located in the mitochondrial matrix in close proximity to a primary endogenous source of superoxide, the mitochondrial respiratory chain. SOD-3 is a heparin-binding multimer of disulfide-linked dimers, primarily expressed in human lungs, vessel walls and airways. SOD-4 is a copper chaperone for superoxide dismutase (CCS), which specifically delivers Cu to copper/zinc superoxide dismutase. CCS may activate copper/zinc superoxide dismutase through direct insertion of the Cu cofactor.

Immunogen:
Recombinant human protein purified from E.coli.

Host:
Rabbit

Isotype:
IgG

Species Reactivity:
Human, Mouse and Rat. Others not tested.

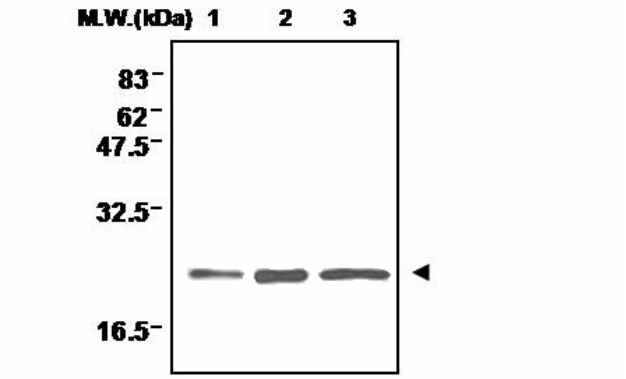
Format:
HEPES with 0.15M NaCl with protein stabilizer, 0.03% sodium azide and 50% glycerol

Positive Control:
HeLa

Storage:
Store at -20℃. Avoid repeated freeze/thaw cycles.

Applications:
- Western Blot: 1:2000 suggested dilution
- Immunoprecipitation: 1 µL

The optimal dilution for a specific application should be determined by the researcher.



IMMUNOBLOT ANALYSIS of cell lysates:
Lane 1: HeLa cell lysates Lane 2: Mouse Kidney
Lane 3: Rat Brain

Limitations:
For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:
No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.