

Rat Anti-Glutathione Polyclonal: RT0003

Intended Use: For Research Use Only

Description: Superoxide Dismutase (SOD) or CuZn-SOD (SOD1), a cytoplasmic and mitochondrial intermembrane space protein is located on human chromosome 21q22. It belongs to superoxide dismutase multigene family. It binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. This isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring 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.

Specifications

Clone: Polyclonal
 Source: Rat
 Isotype: IgG
 Reactivity: Eukaryote
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
Glutathione Concentrated	RT0003	1 ml

IHC Procedure

Positive Control Tissue: Human kidney
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.

References:

1. A Novel a-Calcitonin Gene-Related Peptide Analogue Protects Against End-Organ Damage in Experimental Hypertension, Cardiac Hypertrophy, and Heart Failure. Aubdool AA, et al. Circulation 136:367-383, 2017.
2. Loss of selenocysteine insertion sequence binding protein 2 suppresses the proliferation, migration/invasion and hormone secretion of human trophoblast cells via the PI3K/Akt and ERK signaling pathway. Li M, et al. Placenta 55:81-89, 2017.
3. Chronic Endurance Exercise Impairs Cardiac Structure and Function in Middle-Aged Mice with Impaired Nrf2 Signaling. Shanmugam G, et al. Front Physiol 8:268, 2017.
4. A biphasic effect of TNF-a in regulation of the Keap1/Nrf2 pathway in cardiomyocytes. Shanmugam G, et al. Redox Biol 9:77-89, 2016.
5. Neuroprotective role of superoxide dismutase 1 in retinal ganglion cells and inner nuclear layer cells against N-methyl-d-aspartate-induced cytotoxicity. Yuki K, et al. Exp Eye Res 115C:230-238, 2013.