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Datasheet for 009-001-G14S

SOD2 protein-GST fusion

Overview

Description:	SOD2 recombinant protein-GST fusion protein - 009-001-G14S
Item No.:	009-001-G14S
Size:	20 µg
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	SOD2 (superoxide dismutase 2) is a member of the iron/manganese superoxide dismutase family. SOD2 binds to the superoxide byproducts of the mitochondrial electron transport chain and converts them to hydrogen peroxide and diatomic oxygen. Failure of SOD2 to remove the superoxide byproducts leads to an increase in mitochondrial reactive oxygen species resulting in biochemical aberrations with features reminiscent of mitochondrial myopathy, Friedreich ataxia, and HMGCL deficiency (1). Mutations in SOD2 have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer (2). SOD2 Protein is ideal for investigators involved in Signaling Proteins, Cell Stress & Chaperone Proteins, Apoptosis/Autophagy, Cancer, Cardiovascular Disease, Cellular Stress, Inflammation, Neurobiology, and p38 Pathway research.
Synonyms:	Mn-SOD, MNSOD, IPO-B, Superoxide Dismutase 2
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein

Target Details

Gene Name:	SOD2
Purity/Specificity:	Recombinant full-length human SOD2 was expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >90% by densitometry.
Relevant Links:	• NCBI - NM_000636

Application Details

Application Note:	SOD2 Protein is stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol. SOD2 Protein is suitable for use in Western Blot. Expect a band approximately ~51kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	User Optimized

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.2 µg/µL
Buffer:	See application note.

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.

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