

Datasheet for 009-001-T08S**pTEN protein-GST fusion****Overview**

Description:	pTEN recombinant protein-GST fusion protein - 009-001-T08S
Item No.:	009-001-T08S
Size:	20 µg
Applications:	SDS-PAGE, WB
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	PTEN (phosphatase and tensin homolog) is a tumor suppressor that is frequently mutated in a large number of cancers (1). PTEN has phosphatidylinositol-3, 4, 5-trisphosphate 3-phosphatase activity and contains a tensin like domain as well as a catalytic domain similar to that of the dual specificity protein tyrosine phosphatases. Unlike most of the protein tyrosine phosphatases, PTEN preferentially dephosphorylates phosphoinositide substrates and is responsible for negatively regulating the intracellular levels of phosphatidylinositol-3, 4, 5-trisphosphate in cells. PTEN functions as a tumor suppressor by negatively regulating the PI3K/AKT signaling pathway (2). PTEN protein is ideal for investigators involved in Signaling Proteins, Cellular Proteins, AKT/PKB Pathway, Angiogenesis, Apoptosis/Autophagy, Cancer, Cardiovascular Disease, Inflammation, Invasion/Metastasis, Metabolic Disorder, Neurobiology, NfκB Pathway, Phosphatases, and WNT Signaling research.
Synonyms:	BZS, MHAM, TEP1, MMAC1, PTEN1, MGC11227, Phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN, Mutated in multiple advanced cancers 1, Phosphatase and tensin homolog
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein

Target Details

Gene Name:	PTEN
-------------------	------

Purity/Specificity:	Recombinant full-length human PTEN was expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >95% by densitometry.
----------------------------	---

Relevant Links:	• NCBI - NM_000314
------------------------	--

Application Details

Tested Applications:	SDS-PAGE, WB
-----------------------------	--------------

Application Note:	PTEN Protein is stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM PMSF, 25% glycerol. Human PTEN Protein has been tested in SDS-Page and is suitable for use in Western Blot. Expect a band approximately ~76kDa 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.