

Datasheet for ABIN7197261
OXSRI Protein (GST tag)[Go to Product page](#)

1 Image

Overview

Quantity:	50 µg
Target:	OXSRI
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This OXSRI protein is labelled with GST tag.

Product Details

Purpose:	Recombinant Human OXSRI/OSR1 Protein (GST Tag)
Sequence:	Met 1-Ser 527
Characteristics:	A DNA sequence encoding the full length of human OXSRI (NP_005100.1) (Met 1-Ser 527) was fused with the GST tag at the N-terminus.
Purity:	> 88 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	OXSRI
Alternative Name:	OXSRI/OSR1 (OXSRI Products)
Background:	Background: Oxidative stress-responsive 1 protein (OXSRI), also known as Serine/threonine-protein kinase OSR1, is a member of the Ser/Thr protein kinase family of proteins. OXSRI regulates downstream kinases in response to environmental stress, and may play a role in

Target Details

regulating the actin cytoskeleton. OXSR1 is a 58 kDa protein of 527 amino acids that is widely expressed in mammalian tissues and cell lines. The amino acid (aa) sequence of the predicted OXSR1 protein is 39 % identical to that of human SOK1. Of potential regulators surveyed, endogenous OXSR1 is activated only by osmotic stresses, notably sorbitol and to a lesser extent NaCl. OXSR1 did not increase the activity of coexpressed JNK, nor did it activate three other MAPKs, p38, ERK2, and ERK5. Phosphorylation by OXSR1 modulates the G protein sensitivity of PAK isoforms. The OXSR1 and SPAK are key enzymes in a signalling cascade regulating the activity of Na⁺/K⁺/2Cl⁻ co-transporters (NKCCs) in response to osmotic stress. Both kinases have a conserved carboxy-terminal (CCT) domain, which recognizes a unique peptide (Arg-Phe-Xaa-Val) motif. The OXSR1 and SPAK kinases specifically recognize their upstream activators and downstream substrates.

Synonym: OSR1

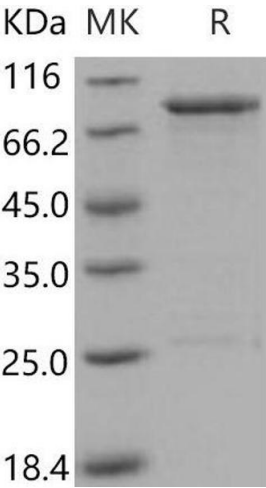
Molecular Weight:	84 kDa
NCBI Accession:	NP_005100
Pathways:	Tube Formation

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Frozen, Liquid
Buffer:	Supplied as sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 0.5 mM GSH, 0.5 mM PMSF, 0.5 mM EDTA, 10 % glycerol
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.