

SHP-1 (Ab-564) Antibody

Catalog No: #33221

Package Size: #33221-1 50ul #33221-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

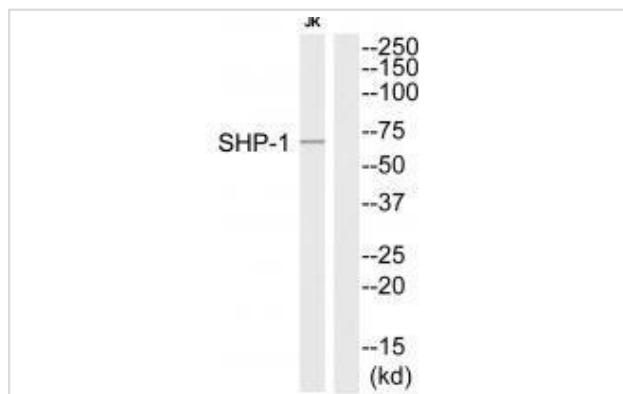
Description

Product Name	SHP-1 (Ab-564) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total SHP-1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from C-terminal of human SHP-1.
Target Name	SHP-1
Other Names	HCP; HCPH; hematopoietic cell phosphatase; Hematopoietic cell protein-tyrosine phosphatase; HPTP1C
Accession No.	Swiss-Prot: O75582NCBI Gene ID: 5777
SDS-PAGE MW	68kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

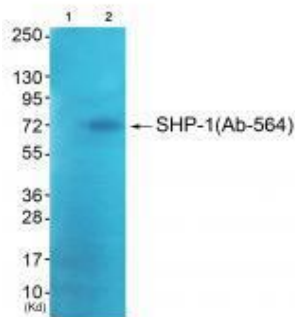
Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from Jurkat cells, using SHP-1 (Ab-564) antibody #33221.



Western blot analysis of extracts from JK cells (Lane 2), using SHP-1 (Ab-564) antibody #33221. The lane on the left is treated with synthesized peptide.

Background

Serine/threonine-protein kinase that is required for the mitogen or stress-induced phosphorylation of the transcription factors CREB1 and ATF1 and for the regulation of the transcription factors RELA, STAT3 and ETV1/ER81, and that contributes to gene activation by histone phosphorylation and functions in the regulation of inflammatory genes. Phosphorylates CREB1 and ATF1 in response to mitogenic or stress stimuli such as UV-C irradiation, epidermal growth factor (EGF) and anisomycin. Plays an essential role in the control of RELA transcriptional activity in response to TNF and upon glucocorticoid, associates in the cytoplasm with the glucocorticoid receptor NR3C1 and contributes to RELA inhibition and repression of inflammatory gene expression. In skeletal myoblasts is required for phosphorylation of RELA at 'Ser-276' during oxidative stress. In erythropoietin-stimulated cells, is necessary for the 'Ser-727' phosphorylation of STAT3 and regulation of its transcriptional potential. Phosphorylates ETV1/ER81 at 'Ser-191' and 'Ser-216', and thereby regulates its ability to stimulate transcription, which may be important during development and breast tumor formation. Directly represses transcription via phosphorylation of 'Ser-1' of histone H2A. Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and EGF, which results in the transcriptional activation of several immediate early genes, including proto-oncogenes c-fos/FOS and c-jun/JUN. May also phosphorylate 'Ser-28' of histone H3. Mediates the mitogen- and stress-induced phosphorylation of high mobility group protein 1 (HMGN1/HMG14). In lipopolysaccharide-stimulated primary macrophages, acts downstream of the Toll-like receptor TLR4 to limit the production of pro-inflammatory cytokines. Functions probably by inducing transcription of the MAP kinase phosphatase DUSP1 and the anti-inflammatory cytokine interleukin 10 (IL10), via CREB1 and ATF1 transcription factors. Plays a role in neuronal cell death by mediating the downstream effects of excitotoxic injury.

Yi T., Mol. Cell. Biol. 12:836-846(1992).

Shen S.H., Nature 352:736-739(1991).

Plutzky J., Proc. Natl. Acad. Sci. U.S.A. 89:1123-1127(1992).

Published Papers

el at., Inhibition of Src Homology 2 Domain Containing Protein Tyrosine Phosphatase as the Possible Mechanism of Metformin-Assisted Amelioration of Obesity Induced Insulin Resistance in High Fat Diet Fed C57BL/6J Mice. In Biochem Biophys Res Commun on 2017 May 20 by Yadhu Sharma , Samina Bashir, et al.. PMID: 28389241, , (2017)

[PMID:28389241](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.