

CIS (N-19): sc-1529

BACKGROUND

Src homology (SH2) domains are noncatalytic sequences that are conserved among a number of cytoplasmic signaling proteins. These signaling proteins are directly regulated by receptor tyrosine kinases and control the activation of mitogenic signal transduction pathways by such receptors. For instance, ligand-induced activation of the EGF and PDGF receptors induces dimerization, triggers receptor autophosphorylation on tyrosine residues and results in the binding of a number of cytoplasmic SH2 domain proteins such as PLC γ 1, Ras GAP and PI 3-kinase p85 to the activated receptors. The Shc gene encodes three proteins with a single SH2 domain but no identifiable catalytic domain. CIS, cytokine-inducible SH2-containing protein, is a 267 amino acid protein with a single 96 amino acid SH2 domain that associates the tyrosine-phosphorylated β chain of the IL-3 receptor with the tyrosine-phosphorylated Epo receptor. CIS was initially described as an immediate early cytokine-responsive gene and appears to be a unique regulator of cytokine signaling.

CHROMOSOMAL LOCATION

Genetic locus: Cish (mouse) mapping to 9 F1.

SOURCE

CIS (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CIS of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1529 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CIS (N-19) is recommended for detection of CIS of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CIS (N-19) is also recommended for detection of CIS in additional species, including equine and bovine.

Suitable for use as control antibody for CIS siRNA (m): sc-61854, CIS shRNA Plasmid (m): sc-61854-SH and CIS shRNA (m) Lentiviral Particles: sc-61854-V.

Molecular Weight of CIS: 32 kDa.

Positive Controls: CIS (m2): 293T Lysate: sc-119271 or mouse liver extract: sc-2256.

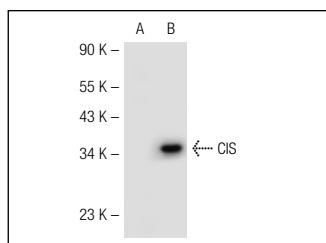
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



CIS (N-19): sc-1529. Western blot analysis of CIS expression in non-transfected: sc-117752 (A) and mouse CIS transfected: sc-119271 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

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- Patra, A.K., et al. 2004. Active protein kinase B regulates TCR responsiveness by modulating cytoplasmic-nuclear localization of NFAT and NF κ B proteins. *J. Immunol.* 172: 4812-4820.
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- Miquet, J.G., et al. 2005. Desensitization of the JAK2/STAT5 GH signaling pathway associated with increased CIS protein content in liver of pregnant mice. *Am. J. Physiol. Endocrinol. Metab.* 289: E600-E607.
- Lund, R.J., et al. 2007. Genome-wide identification of novel genes involved in early Th1 and Th2 cell differentiation. *J. Immunol.* 178: 3648-3660.
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Try **CIS (F-9): sc-166326** or **CIS (D-2): sc-166363**, our highly recommended monoclonal alternatives to CIS (N-19).