

CS1 (K-12): sc-46519

BACKGROUND

CS1, also known as novel Ly9, SLAMF7, 19A24 or CRACC, is a homophilic cell surface receptor. It is a member of the SLAM (signaling lymphocytic activation molecule) family of receptors expressed on natural killer (NK) cells, T cells and stimulated B cells. CS1 contains immunoreceptor tyrosine-based switch motifs in its cytoplasmic domain but, unlike other SLAM receptors, it does not recruit SAP (SLAM-associated protein). In humans, CS1 activates NK cells through an EAT-2-mediated pathway that is SAP-independent. CS1 recruits and associates with EAT-2, a protein closely related to SAP. EAT-2 induces phosphorylation of CS1 which then, upon ligand binding, activates downstream cytotoxicity effectors PLC γ and PI3K. In mice, the EAT-2 association with CS1 has an inhibitory effect on the activation of NK cells.

REFERENCES

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- Aversa, G., et al. 1997. SLAM and its role in T cell activation and Th cell responses. *Immunol. Cell Biol.* 75: 202-205.
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- Favero, J., et al. 1998. Effector pathways regulating T cell activation. *Biochem. Pharmacol.* 56: 1539-1547.
- Sayos, J., et al. 1998. The X-linked lymphoproliferative-disease gene product SAP regulates signals induced through the co-receptor SLAM. *Nature* 395: 462-469.
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CHROMOSOMAL LOCATION

Genetic locus: SLAMF7 (human) mapping to 1q23.3; Slamf7 (mouse) mapping to 1 H3.

SOURCE

CS1 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CS1 of human 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-46519 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CS1 (K-12) is recommended for detection of CS1 of mouse and human 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).

Suitable for use as control antibody for CS1 siRNA (h): sc-45751, CS1 siRNA (m): sc-45752, CS1 shRNA Plasmid (h): sc-45751-SH, CS1 shRNA Plasmid (m): sc-45752-SH, CS1 shRNA (h) Lentiviral Particles: sc-45751-V and CS1 shRNA (m) Lentiviral Particles: sc-45752-V.

Molecular Weight of CS1: 37 kDa.

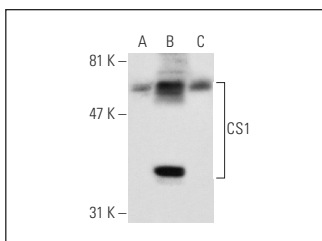
Molecular Weight of glycosylated CS1: 66 kDa.

Positive Controls: CS1 (h): 293T Lysate: sc-114071, NK-92 whole cell lysate: sc-364788 or K-562 whole cell lysate: sc-2203.

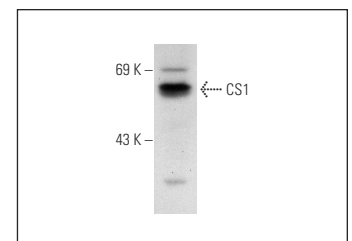
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruzTM Mounting Medium: sc-24941.

DATA



CS1 (K-12): sc-46519. Western blot analysis of CS1 expression in non-transfected 293T: sc-117752 (A), human CS1 transfected 293T: sc-114071 (B) and NK-92 (C) whole cell lysates.



CS1 (K-12): sc-46519. Western blot analysis of CS1 expression in K-562 whole cell lysate.

RESEARCH USE

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

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Try **CS1 (162.1): sc-53577** or **CS1 (24.1): sc-53576**, our highly recommended monoclonal alternatives to CS1 (K-12). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **CS1 (162.1): sc-53577**.