



2'-PDE (P-14): sc-102277

BACKGROUND

C-C or β chemokine family members are characterized by a pair of adjacent cysteine residues and serve as potent chemoattractants and activators of monocytes and T cells. However, this receptor family has also been shown to facilitate viral infection. 2'-PDE, also designated PDE12, is a member of the CCR4/Nocturin family and a key component of the 2-5A system. The 2-5A system is a major pathway induced by interferons (IFNs), in which unusual oligoadenylates, referred to as 2-5As, modulate RNA degradation in cells. 2'-PDE degrades 2-5A to AMP and ATP. Viral infection of cells induces the secretion of IFNs, which upregulate 2',5'-OASs. Suppression of 2'-PDE results in significant reduction of viral replication, whereas overexpression of 2'-PDE has been shown to protect cells from IFN-induced antiproliferative activity. Therefore, 2'-PDE may act as a potential target for antiviral and anti-tumor treatments.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PDE12 (human) mapping to 3p14.3; E430028B21Rik (mouse) mapping to 14 A3.

SOURCE

2'-PDE (P-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of 2'-PDE of human origin.

PRODUCT

Each vial contains 100 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-102277 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

2'-PDE (P-14) is recommended for detection of 2'-PDE of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 2'-PDE siRNA (h): sc-78240, 2'-PDE siRNA (m): sc-108585, 2'-PDE shRNA Plasmid (h): sc-78240-SH, 2'-PDE shRNA Plasmid (m): sc-108585-SH, 2'-PDE shRNA (h) Lentiviral Particles: sc-78240-V and 2'-PDE shRNA (m) Lentiviral Particles: sc-108585-V.

Molecular Weight of 2'-PDE: 65 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.