

adenosine deaminase (N-19): sc-7451

BACKGROUND

Adenosine deaminase is an enzyme that is present in most tissues. It exists predominantly as a monomer, although in some tissues it is associated with adenosine deaminase-binding protein. Adenosine deaminase degrades extracellular adenosine, which is toxic for lymphocytes. Adenosine deaminase also effects co-stimulatory signals in T cells via interactions with CD26. Deficiency of adenosine deaminase has been shown to lead to immunodeficiency diseases such as SCID (severe combined immunodeficiency disease) and has been associated with hereditary hemolytic anemia, a disease in which adenosine deaminase levels are elevated 50 to 70 fold.

CHROMOSOMAL LOCATION

Genetic locus: ADA (human) mapping to 20q13.12; Ada (mouse) mapping to 2 H3.

SOURCE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7451 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

adenosine deaminase (N-19) is recommended for detection of adenosine deaminase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

adenosine deaminase (N-19) is also recommended for detection of adenosine deaminase in additional species, including canine and bovine.

Suitable for use as control antibody for adenosine deaminase siRNA (h): sc-29644, adenosine deaminase siRNA (m): sc-29645, adenosine deaminase shRNA Plasmid (h): sc-29644-SH, adenosine deaminase shRNA Plasmid (m): sc-29645-SH, adenosine deaminase shRNA (h) Lentiviral Particles: sc-29644-V and adenosine deaminase shRNA (m) Lentiviral Particles: sc-29645-V.

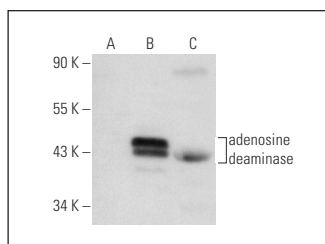
Molecular Weight of adenosine deaminase: 41 kDa.

Positive Controls: adenosine deaminase (h): 293T Lysate: sc-159789, MOLT-4 cell lysate: sc-2233 or Jurkat whole cell lysate: sc-2204.

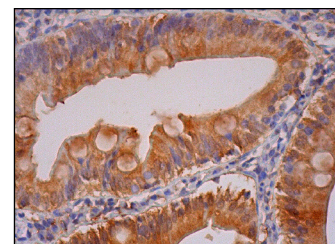
RECOMMENDED SECONDARY REAGENTS

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 Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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 UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



adenosine deaminase (N-19): sc-7451. Western blot analysis of adenosine deaminase expression in non-transfected 293T: sc-117752 (A), human adenosine deaminase transfected 293T: sc-159789 (B) and Jurkat (C) whole cell lysates.



adenosine deaminase (N-19): sc-7451. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Carter, M.E., et al. 2009. Sleep homeostasis modulates hypocretin-mediated sleep-to-wake transitions. *J. Neurosci.* 29: 10939-10949.

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.

MONOS
Satisfaction
Guaranteed

Try **adenosine deaminase (D-4): sc-28346** or **adenosine deaminase (D-10): sc-376889**, our highly recommended monoclonal alternatives to adenosine deaminase (N-19).