

# APPBP1 (P-20): sc-79844

## BACKGROUND

APPBP1 ( $\beta$ -Amyloid precursor protein-binding protein 1), also known as NAE1 (NEDD8-activating enzyme E1 regulatory subunit 1), HPP1 or ula-1, is a member of the ubiquitin-activating E1 family. In fetal tissues APPBP1 is widely expressed and in adult tissues it is expressed throughout the brain. APPBP1 is a cell membrane associated protein and functions as the regulatory subunit in a heterodimer with UBA3. The APPBP1/UBA3 complex binds to and activates NEDD8, a ubiquitin-like protein involved in signal transduction, cell proliferation and development. This suggests that APPBP1 affects a variety of cellular functions. In addition, APPBP1 is essential for cell cycle progression through the S/M checkpoint. More specifically, it inhibits the entry into S phase and promotes entry into M phase.

## CHROMOSOMAL LOCATION

Genetic locus: NAE1 (human) mapping to 16q22.1; Nae1 (mouse) mapping to 8 D3.

## SOURCE

APPBP1 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of APPBP1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-79844 P, (100  $\mu$ g 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

APPBP1 (P-20) is recommended for detection of APPBP1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

APPBP1 (P-20) is also recommended for detection of APPBP1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for APPBP1 siRNA (h): sc-77421, APPBP1 siRNA (m): sc-106975, APPBP1 shRNA Plasmid (h): sc-77421-SH, APPBP1 shRNA Plasmid (m): sc-106975-SH, APPBP1 shRNA (h) Lentiviral Particles: sc-77421-V and APPBP1 shRNA (m) Lentiviral Particles: sc-106975-V.

Molecular Weight of APPBP1 membrane associated form: 65 kDa.

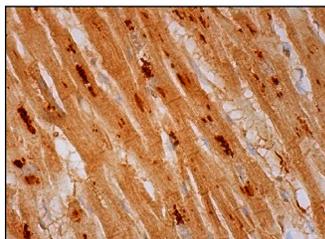
Molecular Weight of APPBP1 cytosolic form: 59 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



APPBP1 (P-20): sc-79844. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **APPBP1 (C-2): sc-390002** or **APPBP1 (20): sc-135839**, our highly recommended monoclonal alternatives to APPBP1 (P-20).