## SANTA CRUZ BIOTECHNOLOGY, INC.

# CLEC-16A (Q-16): sc-160243



#### BACKGROUND

The human  $\beta$ -glucan protein (Dectin-1) is a small, type II transmembrane receptor that enables  $\beta$ -glucan-dependent, nonopsonic recognition of zymosan and other yeast-derived particles by primary macrophages. Dectin-1 is expressed in dendritic cells, and is the human homologue of the C-type (calcium dependent) lectin-like receptor (CLEC) family that plays an important role in regulating innate immunity. CLEC-16A (C-type lectin domain family 16, member A), also known as Gop-1, is a 1,053 amino acid member of the CLEC family and is expressed in dendritic cells, immune cells, B lymphocytes and natural killer cells. Defects in the gene encoding CLEC-16A are associated with Insulin-dependent diabetes mellitus (IDDM) (also known as type I diabetes) and primary adrenal insufficiency. Multiple isoforms of CLEC-16A exist due to alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: CLEC16A (human) mapping to 16p13.13; Clec16a (mouse) mapping to 16 A1.

#### SOURCE

CLEC-16A (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CLEC-16A 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-160243 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

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

## APPLICATIONS

CLEC-16A (Q-16) is recommended for detection of CLEC-16A 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), 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).

CLEC-16A (Q-16) is also recommended for detection of CLEC-16A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CLEC-16A siRNA (h): sc-93056, CLEC-16A siRNA (m): sc-142379, CLEC-16A shRNA Plasmid (h): sc-93056-SH, CLEC-16A shRNA Plasmid (m): sc-142379-SH, CLEC-16A shRNA (h) Lentiviral Particles: sc-93056-V and CLEC-16A shRNA (m) Lentiviral Particles: sc-142379-V.

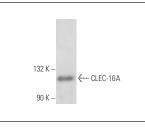
Molecular Weight of CLEC-16A: 118 kDa.

Positive Controls: WEHI-231 whole cell lysate: sc-2213.

#### **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) Immuno-histochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

### DATA





CLEC-16A (Q-16): sc-160243. Western blot analysis of CLEC-16A expression in WEHI-231 whole cell lysate.

CLEC-16A (Q-16): sc-160243. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic and membrane staining of glandular cells and faint cytoplasmic staining of lymphoid cells.

## STORAGE

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

#### PROTOCOLS

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



Try **CLEC-16A (H-4):** sc-398516, our highly recommended monoclonal alternative to CLEC-16A (Ω-16).