# EDEM (N-16): sc-27389



The Power to Question

#### **BACKGROUND**

Proteins expressed in the endoplasmic reticulum (ER) are subjected to a tight quality control. Terminally misfolded proteins in the endoplasmic reticulum (ER) are retrotranslocated to the cytoplasm and degraded by proteasomes through a mechanism known as ER-associated degradation (ERAD). EDEM (ER degradation-enhancing  $\alpha$ -mannosidase-like) protein is a type II membrane protein that localizes to the ER and is directly involved in ERAD. EDEM targets misfolded glycoproteins for degradation in an N-glycan-dependent manner and extracts misfolded glycoproteins from the calnexin cycle. The human EDEM gene maps to chromosome 3p.

# **REFERENCES**

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- 2. Yoshida, H., et al. 2003. A time-dependent phase shift in the mammalian unfolded protein response. Dev. Cell 4: 265-271.
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- 8. Olivari, S., et al. 2005. A novel stress-induced EDEM variant regulating endoplasmic reticulum-associated glycoprotein degradation. J. Biol. Chem. 280: 2424-2428.

# CHROMOSOMAL LOCATION

Genetic locus: EDEM1 (human) mapping to 3p26.1.

## **SOURCE**

EDEM (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EDEM of human origin.

## **PRODUCT**

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

Blocking peptide available for competition studies, sc-27389 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**

EDEM (N-16) is recommended for detection of EDEM of 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 EDEM siRNA (h): sc-43745, EDEM shRNA Plasmid (h): sc-43745-SH and EDEM shRNA (h) Lentiviral Particles: sc-43745-V.

Molecular Weight of EDEM: 74 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237.

# **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.

# **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.



Try **EDEM (D-1):** sc-377394, our highly recommended monoclonal aternative to EDEM (N-16). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **EDEM (D-1):** sc-377394.

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