SANTA CRUZ BIOTECHNOLOGY, INC.

Proteassemblin (E-20): sc-67799

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Proteassemblin, also known as POMP (proteasome maturation protein), UMP1 or Voltage-gated potassium channel β subunit 4.1, is an endoplasmic reticulum (ER) associated protein that functions as a molecular chaperone required for proteasome and immunoproteasome assembly. Essential for cell viability and induced by IFN-γ, Proteassemblin associates with preproteasomes and specifically binds to Proteasome 20S β1i, β1, β5, β6 and β7 subunits. Proteassemblin is responsible for mediating the binding of the 20S preproteasome to the ER membrane and is required for incorporation of the β subunits into the 20S Proteasome. Proteassemblin is the human homolog of the yeast Ump1 protein. Unlike Ump1, which becomes incorporated into the proteasome, Proteassemblin is degraded upon maturation of the newly formed proteasome.

CHROMOSOMAL LOCATION

Genetic locus: POMP (human) mapping to 13q12.3; Pomp (mouse) mapping to 5 G3.

SOURCE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67799 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

Proteassemblin (E-20) is recommended for detection of Proteassemblin 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Proteassemblin (E-20) is also recommended for detection of proteassemblin in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for Proteassemblin siRNA (h): sc-62890, Proteassemblin siRNA (m): sc-62891, Proteassemblin shRNA Plasmid (h): sc-62890-SH, Proteassemblin shRNA Plasmid (m): sc-62891-SH, Proteassemblin shRNA (h) Lentiviral Particles: sc-62890-V and Proteassemblin shRNA (m) Lentiviral Particles: sc-62891-V.

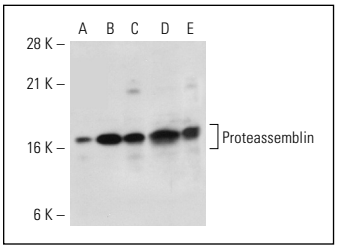
Molecular Weight of Proteassemblin: 16 kDa.

Positive Controls: Proteassemblin (h): 293 Lysate: sc-110788, HL-60 whole cell lysate: sc-2209 or 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) 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.

DATA



Proteassemblin (E-20): sc-67799. Western blot analysis of Proteassemblin expression in non-transfected 293: sc-110760 (**A**), human Proteassemblin transfected 293: sc-110788 (**B**), HL-60 (**C**), SW480 (**D**) and Jurkat (**E**) whole cell lysates.

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 **Proteassemblin (B-1): sc-393267** or **Proteassemblin (H-3): sc-271414**, our highly recommended monoclonal alternatives to Proteassemblin (E-20).