

Proteasemblin (FL-141): sc-68414

BACKGROUND

Proteasemblin, 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 , Proteasemblin associates with preproteasomes and specifically binds to proteasome 20S β 1i, β 1, β 5, β 6 and β 7 subunits. Proteasemblin 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. Proteasemblin is the human homolog of the yeast Ump1 protein. Unlike Ump1, which becomes incorporated into the proteasome, Proteasemblin 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

Proteasemblin (FL-141) is a rabbit polyclonal antibody raised against amino acids 1-141 representing full length Proteasemblin of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

Proteasemblin (FL-141) is recommended for detection of Proteasemblin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Proteasemblin (FL-141) is also recommended for detection of Proteasemblin in additional species, including equine, canine and bovine.

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

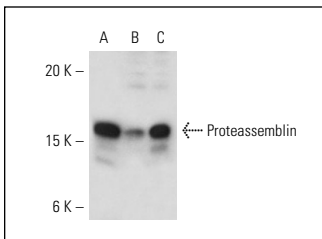
Molecular Weight of Proteasemblin: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HL-60 whole cell lysate: sc-2209 or SW480 cell lysate: sc-2219.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Proteasemblin (FL-141): sc-68414. Western blot analysis of Proteasemblin expression in HL-60 (A), HeLa (B) and SW480 (C) 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.


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Guaranteed

Try **Proteasemblin (B-1): sc-393267** or **Proteasemblin (H-3): sc-271414**, our highly recommended monoclonal alternatives to Proteasemblin (FL-141).