BACKGROUND

The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, which include the assembly and sequestering of multiprotein complexes, transportation of nascent polypeptide chains across cellular membranes and regulation of protein folding. Heat shock proteins (also known as molecular chaperones) fall into six general families: HSP 90, HSP 70, HSP 60, the low molecular weight HSPs, the immunophilins and the HSP 110 family. The HSP 110 family (also known as the HSP 105 family) is composed of HSP 105, Apg-1 and Apg-2. Apg-1, also known as HSPA4L (heat shock 70 kDa protein 4-like) or Osp94 (osmotic stress protein 94), is an 839 amino acid protein that possesses chaperone activity in vitro, where it inhibits aggregation of citrate synthase. A homodimer, Apg-1 subcellularly localizes to cytoplasm and nucleus, and may translocate to nucleus after heat shock.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: HSPA4L (human) mapping to 4q28.1; Hspa4l (mouse) mapping to 3 B.

SOURCE

Apg-1 (B-7) is a mouse monoclonal antibody raised against amino acids 231-838 of Apg-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain 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.