

Product datasheet for AP31621PU-N

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OriGene Technologies, Inc.

Grp75 (HSPA9) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:Primary AntibodiesApplications:ELISA, IF, IHC, WB

Recommended Dilution: ELISA: 1/5000.

Immunofluorescence: 1/100 - 1/500.

Immunohistochemistry on Paraffin Sections: 1/200.

Western Blot: 1/500 - 1/1000.

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Synthetic peptide corresponding to C-Terminus of Human GRP75.

Specificity: This antibody detects endogenous levels of total GRP75 protein.

Formulation: PBS (without Mg2+, Ca2+), pH 7.4, 150 mM Sodium Chloride, 0.02% Sodium Azide and 50%

Glycerol

State: Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Immunoaffinity Chromatography

Conjugation: Unconjugated

Storage: Store the antibody (in aliquots) at -20°C or lower.

Avoid freeze-thaw cycles.

Stability: Shelf life: one year from despatch.

Gene Name: heat shock protein family A (Hsp70) member 9

Database Link: Entrez Gene 15526 MouseEntrez Gene 291671 RatEntrez Gene 3313 Human

P38646





Background:

Grp75, also known as mortalin, is a member of Hsp70 family of chaperone proteins that is not heat inducible (1, 2). Grp75 is actually induced under conditions of low glucose and other nutritional and environmental stresses. Grp75 resides primarily in the mitochondrial matrix, where it collaborates with Hsp60 in the re-folding of proteins translocated into this organelle (3, 4). Related forms may also be found in the cytosol or on the surface of the extracellular membrane.

Other Grp75 functions include its ability to inactivate the tumor suppressor p53 (5). Studies have found that Grp75 is over-expressed in many tumor tissues and immortalized human cell lines, suggesting its role in the tumor formation (6). Grp75 is also implicated in cell aging, as its overexpression appears to prolong the life span of human fibroblasts (7). And finally, like its E. coli homolog DnaK (8), GRP75 possesses a cation-dependent ATPase activity considered central to its function as a chaperone (9, 10).

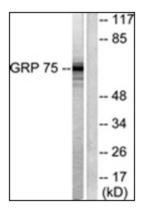
Synonyms: Heat shock 70 kDa protein 9, Peptide-binding protein 74, PBP74, MOT, HSPA9B, Stress-70

protein, Mortalin, 75 kDa glucose-regulated protein

Protein Families: Stem cell - Pluripotency

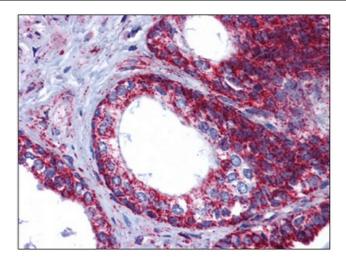
Protein Pathways: RNA degradation

Product images:

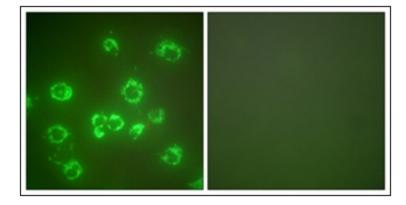


Western blot analysis of extracts from COS7 cells, using GRP75 Antibody. The lane on the right is treated with the synthesized peptide.





Human Prostate: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence analysis of COS7 cells, using GRP75 Antibody. The picture on the right is treated with the synthesized peptide.