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# **Product Information**

Mortalin (47-end), GST-tagged, human recombinant, expressed in Sf9 insect cells

Catalog Number **SRP5102** Storage Temperature –70 °C

Synonyms: HSPA9, CSA, GRP75, HSPA9B, MGC4500, MOT, mot-2, MOT2, MTHSP75, PBP74

### **Product Description**

Mortalin is a mitochondrial chaperone and a member of the heat shock protein 70 family that is constitutively expressed in cells. Mortalin plays a central role in mitochondrial biogenesis through its capacity to direct the import of nuclear-encoded proteins into the mitochondria. Mortalin plays a role in the control of cell proliferation and elevated levels of mortalin have correlated with malignant transformation and poor cancer prognosis. Mortalin can support cancer cell resistance to complement-dependent cytotoxicity. Mortalin expression was decreased in the mitochondrial fraction of neurons from the substantia nigra of Parkinson disease patients. <sup>2</sup>

Recombinant human Mortalin (47-end) protein was expressed in *Sf*9 insect cells using an N-terminal GST tag. The gene accession number is NM\_004134. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~97 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

#### **Precautions and Disclaimer**

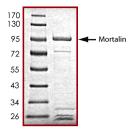
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

## Storage/Stability

The product ships on dry ice and storage at -70 °C is recommended. After opening, aliquot into smaller quantities and store at -70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.

SDS-PAGE Gel of Typical Lot 70–95% (densitometry)



#### References

- Pilzer, D. et al., Mortalin inhibitors sensitize K562 leukemia cells to complement-dependent cytotoxicity. Int. J. Cancer, 126, 1428-1435 (2010).
- De Mena, L. et al., Mutational screening of the mortalin gene (HSPA9) in Parkinson's disease. J. Neural Transm., 116, 1289-1293 (2009).

FF, DKF, MAM 10/11-1