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Product Information

PP1A, active, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5338**
Storage Temperature –70 °C

Synonyms: PP-1A, PPP1A, PPP1CA, MGC1674, MGC15877

Product Description

PP1A is a serine/threonine specific protein phosphatase, which is involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. PP1A is one of the three catalytic subunits of protein phosphatase 1 (PP1).[1] PP1A functions as a suppressor of learning and memory and as a potential mediator of cognitive decline during aging.[2] PP1A is also play a main role in splice site selection and is an important regulator of cardiac function.

Recombinant full-length human PP1A was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The PP1A gene accession number is NM_002708. It is supplied 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: ~62 kDa

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% (SDS-PAGE, densitometry)

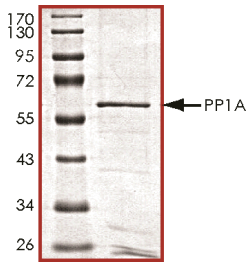
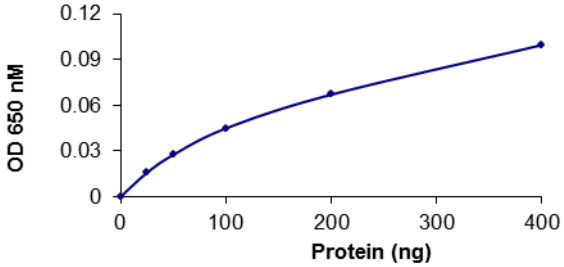


Figure 2.
Specific Activity of Typical Lot:
182–274 nmole/min/mg



Phosphatase activity was determined with a spectrophotometric assay procedure.

References

1. Cohen, P. et al., Protein phosphatases come of age. J. Biol. Chem., **264**, 21435-21438 (1989).
2. Genoux, D. et al., Protein phosphatase 1 is a molecular constraint on learning and memory. Nature, **418**, 970-975 (2002).

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