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Product Information

Cyclin E1, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5345**
Storage Temperature –70 °C

Synonyms: CCNE1, CCNE

Product Description

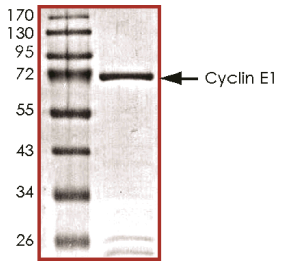
Cyclin E1 belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle that functions as regulators of CDK kinases. Cyclin E1 activity is required for centrosome duplication during S phase and this mechanism could coordinate centrosome reproduction with cycles of DNA synthesis and mitosis.[1] The downregulation of cyclin E-CDK2 kinase activity following the G_1/S-phase transition is necessary for the maintenance of karyotypic stability. Cyclin E also has a modular centrosomal-targeting domain, which is essential for promoting S phase entry in a Cdk2-independent manner.[2]

Recombinant full-length human Cyclin E1 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The gene accession number is NM_001238. 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: ~73 kDa

The enzymatic activity of this product has not been determined.

Figure 1.
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)



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.

References

1. Hinchcliffe, E.H. et al., Requirement of Cdk2-cyclin E activity for repeated centrosome reproduction in *Xenopus* egg extracts. Science, **283**, 851-854 (1999).
2. Matsumoto, Y. et al., A centrosomal localization signal in cyclin E required for Cdk2-independent S phase entry. Science, **306**, 885-888 (2004).

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