

Recombinant Human E2F1, His-tagged

Cat. No. E2F1-1031H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human E2F1, fused with His-tag, was expressed in Baculovirus –insect cell.
Species	Human
Source	Insect Cells
Description	<p>The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionally conserved domains found in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein and another 2 members, E2F2 and E2F3, have an additional cyclin binding domain. This protein binds preferentially to retinoblastoma protein pRB in a cell-cycle dependent manner. It can mediate both cell proliferation and p53-dependent/independent apoptosis.</p>
Form	The protein is in 20mM Tris-HCl pH7.9, 100mM NaCl, 0.2mM EDTA, 1mM DTT and 20% glycerol.
Molecular Mass	48.6 kDa.

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AA Sequence

ALAGAPAGGP CAPALEALLG AGALRLLDSS QIVIISAAQD ASAPPAPTGP
 AAPAAGPCDPDLLLFATPQA PRPTPSAPRP ALGRPPVKRR LDLETDHQYL
 AESSGPARGR GRHPGKGVKSPGEEKSRYETS LNLTTKRFL ELLSHSADGVV
 DLNWAAEVLK VQKRRIYDIT NVLEGIQLIAKKSKNHIQWL GSHTTVGVGG
 RLEGLTQDLR QLQESEQQLD HLMNICCTQL RLLSEDTDSQRLAYVTCQDL
 RSIADPAEQM VMVIKAPPET QLQAVDSSSEN FQISLKSQKQ
 PIDVFLCPEETVGGISPGKT PSQEVTSSEE NRATDSATIV SPPSSPPSS
 LTTDPSQSL SLEQEPLLSRMGSLRAPVDE DRLSPLVAAD SLLEHVREDF
 SGLLPEEFIS LSPPEALDY HFGLEEGEGIRDLDFDCDFGD LTPLDF

Purity 90%

Unit Definition 1 unit equals 1 nanogram of purified protein. 1 unit is sufficient for a gel mobility shift assay in a 20 µl reaction; 100 units are sufficient for protein-protein interaction assays.

Applications Recombinant E2F-1 protein can be used 1) for in vitro function studies including transcription, DNA binding and DNA bending assays; 2) for protein-protein interaction assay; and 3) for cell growth and proliferation assays.

Storage Stored at -70°C before use. Avoid repeated freeze thaw cycles.

GENE INFORMATION

Gene Name E2F1 E2F transcription factor 1 [Homo sapiens (human)]

Official Symbol E2F1

Synonyms E2F1; E2F transcription factor 1; RBP3; E2F-1; RBAP1; RBBP3 retinoblastoma-associated protein 1; Transcription factor E2F1; Retinoblastoma-binding protein 3; RBBP-3; PRB-binding protein E2F-1

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Gene ID	1869
mRNA Refseq	NM_005225
Protein Refseq	NP_005216
MIM	189971
UniProt ID	Q01094
Chromosome Location	20q11.2
Pathway	Activation of BH3-only proteins; Activation of NOXA and translocation to mitochondria; Assembly of the pre-replicative complex; Association of licensing factors with the pre-replicative complex
Function	core promoter binding; DNA binding; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity

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