

## Active Recombinant Human EEF1A1, GST-tagged

Cat. No. EEF1A1-8508H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human EEF1A1, fused with GST tag, was expressed in E. coli.

**Species** Human

**Source** E.coli

#### Description

The alpha subunit of elongation factor-1 (EEF1A) is involved in the binding of aminoacyl-tRNAs to 80S ribosomes. During the process, GTP is hydrolyzed into GDP. To perform this function, EEF1A has domains that bind guanine nucleotides, 80S ribosomes, and aminoacyl-tRNAs. Also, EEF1A interacts with the beta subunit of EEF1 to exchange bound GDP for GTP. Multimolecular complexes involving the eukaryotic elongation factor 1A (eEF1A) have been suggested to play an important role in the channeling (vectorial transfer) of tRNA during protein synthesis HIV-1 matrix protein (MA) was found to interact with elongation factor 1-alpha (EF1alpha), an essential component of the translation machinery that delivers aminoacyl-tRNA to ribosomes. The interaction between MA and EF1alpha impairs translation in vitro, a result consistent with a previously proposed model in which inhibition of translation by the accumulation of Gag serves to release viral RNA from polysomes, permitting the RNA to be packaged into nascent virions. It has been identified that the translation elongation factor, eEF1A, and its guanine nucleotide exchange factor, eEF1Bbeta, as translationally controlled tumor protein (TCTP) -interacting partners.

**Form** 20 mM Tris-Cl, pH 7.9, 20% Glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA

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<b>Bio-activity</b>	1 unit equals 1 ng of purified protein. 100 units (ng) are sufficient for a protein-protein interaction assay.
<b>AA Sequence</b>	<p>MGKEKTHINI VVIGHVDSGK STTTGHLIYK CGGIDKRTIE KFEKEAAEMG          KGSFKYAWVL DKLKAERERG ITIDISLWKF ETSKYVVTII DAPGHRDFIK          NMITGTSQAD CAVLIVAAGV GEFEAGISKN GQTREHALLA YTLGVKQLIV          GVNKMDSTEP PYSQKRYEEI VKEVSTYIKK IGYNPDTVAF VPISGWNGDN          MLEPSANMPW FKGWKVTRKD GNASGTTLLE ALDCILPPTR PTDKPLRLPL          QDVYKIGGIG TVPVGRVETG VLKPGMVVTF APVNVTTTEVK SVEMHHEALS          EALPGDNVGF NVKNVSVKDV RRGNAVAGDSK NDPPMEAAGF TAQVIILNHP          GQISAGYAPV LDCHTAHIAC KFAELKEKID RRSKGKLEDG PKFLKSGDAA          IVDMPGKPM CVESFSDYPP LGRFAVRDMR QTVAVGVIIA VDKKAAGAGK          VTKSAQKAQK AK</p>
<b>Purity</b>	>95% as determined by SDS-PAGE
<b>Storage</b>	-80 °C
<b>Concentration</b>	350 µg/ml
<b>Shipping</b>	Dry Ice

## GENE INFORMATION

<b>Gene Name</b>	EEF1A1 eukaryotic translation elongation factor 1 alpha 1 [ Homo sapiens ]
<b>Official Symbol</b>	EEF1A1
<b>Synonyms</b>	EEF1A1; eukaryotic translation elongation factor 1 alpha 1; elongation factor 1-alpha 1; EF-1-alpha-1; EF1a-like protein; CTCL tumor antigen; elongation factor Tu; cervical cancer suppressor 3; elongation factor 1 alpha subunit; prostate tumor-inducing

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protein 1eukaryotic elongation factor 1 A-1; leukocyte receptor cluster member 7; leukocyte receptor cluster (LRC) member 7translation elongation factor 1 alpha 1-like 14; glucocorticoid receptor AF-1 specific elongation factor; eukaryotic translation elongation factor 1 alpha 1-like 14

**Gene ID** [1915](#)

**mRNA Refseq** [NM\\_001402](#)

**Protein Refseq** [NP\\_001393](#)

**MIM** [130590](#)

**UniProt ID** [P68104](#)

**Chromosome Location** 6q14.1

**Pathway** EGFR1 Signaling Pathway, organism-specific biosystem; Eukaryotic Translation Elongation, organism-specific biosystem; Gene Expression, organism-specific biosystem

**Function** GTP binding; GTPase activity; protein binding

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