Data Sheet (Cat.No.TMPY-03976)

TargetMol

EEF1E1 Protein, Human, Recombinant (His)

General Information

Synonyms:	eukaryotic translation elongation factor 1 ε 1;P18;eukaryotic translation elongation factor 1 epsilon 1;AIMP3
Protein Construction:	A DNA sequence encoding the human EEF1E1 (NP_004271.1) (Met1-His174) was expressed with a polyhistide tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	O43324-1
Molecular Weight:	21.6 kDa (predicted); 19-24 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, 10% Glycerol, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

EEF1E1, also known as AIMP3 and p18, is a multifunctional protein that localizes to both the cytoplasm and nucleus. In the cytoplasm, EEF1E1 is an auxiliary component of the macromolecular aminoacyl-tRNA synthase complex. It is comprised of a bifunctional glutamyl-prolyl-tRNA synthase, the monospecific isoleucyl, leucyl, glutaminyl, methionyl, lysyl, arginyl and aspartyl-tRNA synthases, and three auxiliary proteins, EEF1E1/p18,

AIMP2/p38 and AIMP1/p43. EEF1E1 also plays a positive role in ATM/ATR-mediated p53 activation.

Reference

Mao M. et al., 1998, Proc Natl Acad Sci. 95 (14): 8175-80.
Quevillon S. et al., 1999, J Mol Biol. 285 (1): 183-95.
Ahn HC. et al., 2003, FEBS Lett. 542 (1-3): 119-24.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481