

## 32-2847: THG1L Recombinant Protein

**Alternative Name :**

tRNA-histidine guanylyltransferase 1-like (*S. cerevisiae*), Interphase cytoplasmic foci protein 45, probable tRNA(His) guanylyltransferase, induced by high glucose-1, FLJ11601, FLJ20546, ICF45, IHG-1, EC 2.7.7.79, EC 2.7.7.6.

### Description

Source : E.coli. THG1L Human Recombinant produced in E. coli is a single polypeptide chain containing 292 amino acids (30-298) and having a molecular mass of 34.0 kDa. THG1L is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Probable tRNA (His) guanylyltransferase (THG1L) is a member of the tRNA (His) guanylyltransferase family. THG1L which is localized to the cytoplasm also found adjacent to the nuclear membrane and expressed in various tissues, including liver and lung. THG1L is expressed in a cell cycle-dependent manner and may be involved in cell cycle progression and cell proliferation. THG1L adds a GMP to the 5'-end of tRNA(His) after transcription and RNase P cleavage. This step is vital for accurate recognition of the tRNA and for the fidelity of protein synthesis. Upon DNA damage, THG1L is phosphorylated, presumably by ATM or ATR.

### Product Info

**Amount :** 10 µg

**Purification :** Greater than 90% as determined by SDS-PAGE.

**Content :** The THG1L solution (0.5mg/1ml) contains 20mM Tris-HCl buffer (pH 8.0), 100mM NaCl, 1mM DTT and 20% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SGLVPRGSH MGSMASKFE YVRDFEADD CLAHCVVVVR LDGRNFHRFA  
EKHNFAKPND SRALQLMTKC AQTVMEELED IVIAYGQSDE YSFVFKRKTN WFKRRASKFM THVASQFASS  
YVFYWRDYFE DQPLLYPPGF DGRVVVYPSN QTLKDYLSWR QADCHINNLY NTVFWALIQQ SGLTPVQAQG  
RLQGTAAADK NEILFSEFNI NYNNELPMYR KGTVLIWQKV DEVMTKEIKL PTEMGGKMA VTRTRTKPVP  
LHCDIIGDAF WKEHPEILDE DS.

