

UBA5, 1-404aa, human, His tag, E.coli

Cat.NO.: TP04371

3th Edition

Synonyms:Ubiquitin-like modifier-activating enzyme 5, THIFP1,UBE1DC1

Description:UBA5 (ubiquitin-like modifier activating enzyme 5) belongs to the ubiquitin-activating E1 family and UBA5 subfamily. Ubiquitin and ubiquitin-like proteins are known to be covalently conjugated to a variety of cellular substrates via a three-step enzymatic pathway. The ubiquitin-activating enzyme (E1) plays a key role in the first step of ubiquitination pathway to activate ubiquitin or ubiquitin-like proteins. UBA5 had been proved to activate an ubiquitin-like protein, ubiquitin-fold modifier 1 (Ufm1), by forming a high-energy thioester bond. It localizes mainly in cytoplasm, while it mainly localizes to the nucleus in presence of SUMO2. Recombinant human UBA5 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 50mM NaCl

Molecular Weight:47.4kDa (428aa) confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSHMAESVERLQQRVQELERELAQERSLQVPRSGDGGGGRVRIEKMSSEVVD
SNPYSRLMALKRMGIVSDYEKIRTFVAVAIVGVGGVGSVTAEMLTRCGIGKLLLFDYDKVELANMNLFFQPHQAGLS
KVQAAEHTLRNINPDVLFVHNYNITTVENFQHFMDRISNGGLEEGKPVLDLSCVDNFEARMTINTACNELGQTW
MESGVSENAVSGHIQLIIPGESACFACAPPLVVAANIDEKTLKREGVCAASLPTTMGVVAGILVQNVLKFLNFGTVS
FYLGYNAMQDFPPTMSMKPNPQCDDRNCRKQQEYKKKVAALPKQEVIQEEEEIIHEDNEWGIELVSEVSEEEELKN
FSGPVPDLPEGITVAYTIPKKQEDSVTELTVEDSGESLEDLMAKMKNM

Purity:> 95% by HPLC

Concentration:0.5mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.