PRODUCT INFORMATION

Expression system E.coli

Domain 1-494aa

UniProt No. P54578

NCBI Accession No. NP_005142

Alternative Names ubiquitin carboxyl-terminal hydrolase 14, TGT, ubiquitin thioesterase 14

PRODUCT SPECIFICATION

Molecular Weight 58.5 kDa (517aa)

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 20% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

uSP14 is a member of the ubiquitin-specific processing (uBP) family of proteases that is a deubiquitinating enzyme (DuB) with His and Cys domains. This protein is located in the cytoplasm and cleaves the ubiquitin moiety from ubiquitin-fused precursors and ubiquitinylated proteins. Mice with a mutation that results in reduced expression of the ortholog of this protein are retarded for growth, develop severe tremors by 2 to 3 weeks of age followed by hindlimb paralysis and death by 6 to 10 weeks of age. Recombinant human uSP14 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.



Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMPLYSVT VKWGKEKFEG VELNTDEPPM VFKAQLFALT GVQPARQKVM VKGGTLKDDD WGNIKIKNGM TLLMMGSADA LPEEPSAKTV FVEDMTEEQL ASAMELPCGL TNLGNTCYMN ATVQCIRSVP ELKDALKRYA GALRASGEMA SAQYITAALR DLFDSMDKTS SSIPPIILLQ FLHMAFPQFA EKGEQGQYLQ QDANECWIQM MRVLQQKLEA IEDDSVKETD SSSASAATPS KKKSLIDQFF GVEFETTMKC TESEEEEVTK GKENQLQLSC FINQEVKYLF TGLKLRLQEE ITKQSPTLQR NALYIKSSKI SRLPAYLTIQ MVRFFYKEKE SVNAKVLKDV KFPLMLDMYE LCTPELQEKM VSFRSKFKDL EDKKVNQQPN TSDKKSSPQK EVKYEPFSFA DDIGSNNCGY YDLQAVLTHQ GRSSSSGHYV SWVKRKQDEW IKFDDDKVSI VTPEDILRLS GGGDWHIAYV LLYGPRRVEI MEEESEQ

General References

Shinji S, Naito Z, et al. (2009). Oncol Rep. 15(3):539-43. Mines MA, Goodwin JS, et al. (2009). J Biol Chem. 284(9):5742-52.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

