Data Sheet (Cat.No.TMPY-03439)

TargetMol

UBASH3A Protein, Human, Recombinant (aa 354-623, His)

General Information

Synonyms:	TULA;STS-2;CLIP4;ubiquitin associated and SH3 domain containing A;TULA-1
Protein Construction:	A DNA sequence encoding the mature form of human UBASH3A (AAH69511.1) (Ala354-Asn623) was expressed with a polyhistide tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	AAH69511.1
Molecular Weight:	32.2 kDa (predicted); 30 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:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH7.4. 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

UBASH3A is a member of the T-cell ubiquitin ligand (TULA) family. This family consists of two members. Both of them can negatively regulate T-cell signaling. UBASH3A can facilitate growth factor withdrawal-induced apoptosis in T cells, which may occur via its interaction with AIF, an apoptosis-inducing factor. Alternative splicing of UBASH3A gene results in multiple transcript variants. It interferes with CBL-mediated down-regulation and degradation of receptor-type tyrosine kinases. UBASH3A promotes accumulation of activated target receptors,

such as T-cell receptors, EGFR and PDGFRB, on the cell surface. UBASH3A also exhibits negligigle protein tyrosine phosphatase activity at neutral pH. It may act as a dominant-negative regulator of UBASH3B-dependent dephosphorylation. It may also inhibit dynamin-dependent endocytic pathways by functionally sequestering dynamin via its SH3 domain.

Reference

Collingwood TS, et al. (2007) T-cell ubiquitin ligand affects cell death through a functional interaction with apoptosis-inducing factor, a key factor of caspase-independent apoptosis.". J. Biol. Chem. 282 (42): 30920-8.
Smirnova EV, et al. (2008) TULA proteins bind to ABCE-1, a host factor of HIV-1 assembly, and inhibit HIV-1 biogenesis in a UBA-dependent fashion. Virology. 372(1):10-23.
Wattenhofer M, et al. (2001) Isolation and characterization of the UBASH3A gene on 21q22.3 encoding a potential nuclear protein with a novel combination of domains. Hum Genet. 108(2):140-7.