Human XIAP / BIRC4 (BIR3 domain) Protein (His Tag)

Catalog Number: **10606-H07E1**

General Information

Gene Name Synonym:

API3; BIRC4; hIAP-3; hIAP3; IAP-3; ILP1; MIHA; XLP2

Protein Construction:

A DNA sequence encoding the human BIR3 domain of XIAP (NP_001158.2) (Asn252-Thr356) was expressed with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant human BIR3 domain of XIAP consists of 123 amino acids and predicts a molecular mass of 14.3 KDa. It migrates as an approximately 14.8 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

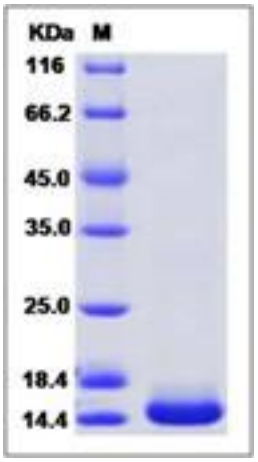
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

E3 ubiquitin-protein ligase XIAP / BIRC4, also known as inhibitor of apoptosis protein 3, X-linked inhibitor of apoptosis protein, and IAP-like protein, is a protein that belongs to a family of apoptotic suppressor proteins. Members of this family share a conserved motif termed, baculovirus IAP repeat, which is necessary for their anti-apoptotic function. XIAP / BIRC4 functions through binding to tumor necrosis factor receptor-associated factors TRAF1 and TRAF2 and inhibits apoptosis induced by menadione, a potent inducer of free radicals, and interleukin 1-beta converting enzyme. XIAP / BIRC4 also inhibits at least two members of the caspase family of cell-death proteases, caspase-3 and caspase-7. Mutations in this encoding gene are the cause of X-linked lymphoproliferative syndrome. Alternate splicing results in multiple transcript variants. Thought to be the most potent apoptosis suppressor, XIAP / BIRC4, directly binds and inhibits caspases -3, -7 and -9. Survivin, which also binds to several caspases, is up-regulated in a many tumour cell types. Defects in XIAP / BIRC4 are the cause of lymphoproliferative syndrome X-linked type 2 (XLP2). XLP is a rare immunodeficiency characterized by extreme susceptibility to infection with Epstein-Barr virus (EBV). Symptoms include severe or fatal mononucleosis, acquired hypogammaglobulinemia, pancytopenia and malignant lymphoma.

References

1.Holcik M, *et al.* (2000) Functional Characterization of the X-Linked Inhibitor of Apoptosis (XIAP) Internal Ribosome Entry Site Element: Role of La Autoantigen in XIAP Translation. Mol Cell Biol. 20 (13): 4648-57. 2.Winsauer G, *et al.* (2008) XIAP regulates bi-phasic NF-kappaB induction involving physical interaction and ubiquitination of MEKK2. Cell Signal. 20 (11): 2107-12. 3.Suzuki Y, *et al.* (2001) X-linked inhibitor of apoptosis protein (XIAP) inhibits caspase-3 and -7 in distinct modes. J Biol Chem. 276 (29): 27058-63.