discontinued TXNIP protein (His tag)

Catalog Number	548230
Synonyms	Thioredoxin-binding protein 2; Vitamin D3 up-regulated protein 1
Species	Human
Expression System	E. coli
Accession	Q9H3M7
Molecular Weight	Predictes a molecular mass of 34.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-298
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-298 aa (Q9H3M7) were fused with 6His tag.

Storage & Handling

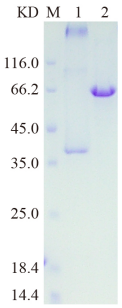
Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

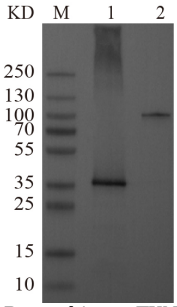
Description	This product offers a recombinant fragment of human Thioredoxin-interacting protein (TXNIP), spanning amino acids 1-298. This stable and soluble fragment is ideal for structural studies, biochemical assays, and functional investigations related to oxidative stress regulation, cell cycle control, and tumor suppression pathways. Thioredoxin-interacting protein (TXNIP) is a multifunctional protein involved in oxidative stress mediation by inhibiting thioredoxin activity, thereby limiting its bioavailability. It acts as a transcriptional repressor and plays a critical role in inducing G0/G1 cell cycle arrest. TXNIP also functions as a tumor suppressor by inhibiting cell growth and contributes to mTORC1 regulation through stabilization of DDIT4. Additionally, it is essential for natural killer cell maturation and interacts with proteins like COPS5 to influence CDKN1B stability. The protein localizes to both the cytoplasm and nucleus, reflecting its diverse regulatory roles in cellular processes.

Validation

SDS-PAGE



Recombinant TXNIP protein (His tag) SDS-PAGE
M: Marker; Lane 1: TXNIP; Lane 2: BSA



Recombinant TXNIP protein (His tag) Western Blot
M: Marker; Lane 1: TXNIP; Lane 2: Multitag Protein