Recombinant BAK protein (His tag)

Catalog Number	542748
Synonyms	Apoptosis regulator BAK; Bcl-2-like protein 7; Bcl2-L-7
Species	Human
Expression System	E. coli
Accession	Q16611
Molecular Weight	Predictes a molecular mass of 22.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	2-187
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 2-187 aa (Q16611) 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 Bcl-2 homologous antagonist/killer (BAK1), spanning residues 2-187, designed for high solubility and stability. Ideal for structural studies and biochemical assays, this fragment enables detailed investigation into the mechanisms of mitochondrial apoptosis regulation. Bcl-2 homologous antagonist/killer (BAK1) is a key regulator of the mitochondrial apoptotic pathway in humans. It functions by promoting mitochondrial outer membrane permeabilization through oligomerization, forming pores that release apoptogenic factors like cytochrome c into the cytosol. This triggers caspase 9 activation, leading to effector caspase processing and apoptosis execution. BAK1 is localized to the mitochondrial outer membrane as a single-pass membrane protein, underscoring its critical role in programmed cell death. The provided fragment was selected computationally to represent a stable, soluble unit for research applications.