Recombinant DNJB1 protein (His tag)

Catalog Number	546874
Synonyms	DnaJ protein homolog 1; Heat shock 40 kDa protein 1; HSP40; Heat shock protein 40; Human DnaJ protein 1; hDj-1
Species	Human
Expression System	E. coli
Accession	P25685
Molecular Weight	Predictes a molecular mass of 13.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	2-108
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-108 aa (P25685) 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	Recombinant Human DnaJ homolog subfamily B member 1 (DNAJB1) Fragment (aa 2-108) is a high-purity protein designed for studying the J-domain functionality. This fragment retains key interactions with HSP70 and supports research into chaperone-mediated protein folding and cellular stress response mechanisms. DnaJ homolog subfamily B member 1 (DNAJB1), also known as HSP40, is a critical co-chaperone that interacts with HSP70 to stimulate its ATPase activity, facilitating proper protein folding and cellular stress adaptation. It regulates heat shock response by modulating HSF1 transcriptional activity during recovery phases and promotes ATP-dependent refolding of unfolded proteins alongside HSPA1A/B. The protein localizes dynamically between the cytoplasm and nucleus, concentrating in nucleoli under heat shock conditions. The provided fragment (aa 2-108) encompasses the complete J-domain (aa 2-70), enabling focused investigation into domain-specific interactions with HSP70 and its role in chaperone-mediated processes.