Recombinant RAE1E protein (His tag)

Catalog Number	545525
Synonyms	Lymphocyte effector toxicity activation ligand; NKG2D ligand 4; N2DL-4; NKG2DL4; RAE-1-like transcript 4; UL16-binding protein 4
Species	Human
Expression System	E. coli
Accession	Q8TD07
Molecular Weight	Predictes a molecular mass of 24.02 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	31-225
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 31-225 aa (Q8TD07) 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 RAET1E Fragment (31-225) is a highly purified protein fragment representing a stable and soluble unit of Retinoic acid early transcript 1E. This fragment maintains key functional characteristics of the full-length protein, which serves as a critical ligand for NKG2D receptor-mediated natural killer cell cytotoxicity, making it ideal for immunological research and assay development. Retinoic acid early transcript 1E (RAET1E), also known as NKG2D ligand 4, is a membrane-bound protein that functions as a key activator of natural killer cell cytotoxicity through its interaction with the KLRK1/NKG2D receptor. This protein plays a crucial role in immune surveillance by mediating the recognition and elimination of target cells. The full-length protein is typically expressed as a single-pass type I membrane protein, though an isoform exists in secreted form. The recombinant fragment (31-225) was specifically designed to provide a stable, soluble unit suitable for structural studies and functional assays, enabling researchers to investigate NKG2D-mediated immune responses without the complications associated with full-length membrane protein expression.