Recombinant LY6K protein (His tag)

Catalog Number	549484
Synonyms	Ly-6K
Species	Human
Expression System	E. coli
Accession	Q17RY6
Molecular Weight	Predictes a molecular mass of 15.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	18-138
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 18-138 aa (Q17RY6) 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 Lymphocyte antigen 6K (Ly-6K) Fragment (18-138) is a high-quality, stable protein fragment designed for structural and biochemical studies. This 121-amino acid soluble unit captures essential functional regions of Ly-6K, a protein critical for male fertility through sperm-egg interaction and implicated in cell growth regulation, offering researchers a reliable tool for investigating its molecular mechanisms. Lymphocyte antigen 6K (Ly-6K), encoded by the LY6K gene in humans, is a multifunctional protein required for sperm migration into the oviduct and male fertility by controlling sperm binding to the zona pellucida. It also plays a role in cell growth processes. The protein exhibits complex subcellular localization, being found secreted, in the cytoplasm, and anchored to the cell membrane via a GPI-anchor. It is additionally present in membrane rafts, cytoplasmic vesicles, secretory vesicles, and the acrosome, suggesting roles in membrane dynamics and cellular trafficking. The recombinant fragment (18-138) represents a computationally selected stable domain ideal for elucidating Ly-6K's structure-function relationships.