Recombinant ECSIT protein (His tag)

Catalog Number	541127
Synonyms	Protein SITPEC
Species	Human
Expression System	E. coli
Accession	Q9BQ95
Molecular Weight	Predictes a molecular mass of 29.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	72-312
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 72-312 aa (Q9BQ95) 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 ECSIT Protein Fragment (72-312) is a high-quality, stable, and soluble fragment of the Evolutionarily conserved signaling intermediate in Toll pathway, mitochondrial (Protein SITPEC). This fragment is ideal for structural studies, biochemical assays, and investigating its roles in innate immune signaling and mitochondrial complex assembly, offering researchers a reliable tool for exploring key cellular pathways. The full-length ECSIT protein functions as an adapter in multiple signaling pathways, including Toll-like receptor (TLR), IL-1, and innate antiviral responses. It contributes to NF-kappa-B activation by forming complexes with TRAF6 and TAK1/MAP3K7, facilitating nuclear translocation and gene expression. Additionally, ECSIT bridges pattern recognition receptors like RIGI and MDA5 to the MAVS complex at mitochondria, enhancing antiviral immunity. It is also part of the MCIA complex, essential for mitochondrial complex I assembly. ECSIT localizes to the cytoplasm, nucleus, and mitochondria, underscoring its versatility in cellular signaling and development. The provided fragment (residues 72-312) was selected for its stability and solubility, enabling detailed mechanistic studies without domain-specific regions.