Recombinant CD47 protein (His tag)

Catalog Number	544869
Synonyms	Antigenic surface determinant protein OA3; Integrin-associated protein; IAP; Protein MER6; CD antigen CD47
Species	Human
Expression System	E. coli
Accession	Q08722
Molecular Weight	Predictes a molecular mass of 15.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	19-141
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 19-141 aa (Q08722) 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 CD47 (Leukocyte Surface Antigen CD47) Fragment (aa 19-141) is a high-purity protein designed for studying the Ig-like V-type domain. This fragment serves as a key tool for investigating cell adhesion, integrin signaling, and immunoregulatory functions in life science research. CD47 is a multi-pass membrane protein located on the cell surface, functioning as an adhesive molecule that mediates cell-to-cell interactions. It acts as a receptor for thrombospondin THBS1 and modulates integrin signaling via heterotrimeric G protein activation. CD47 is involved in diverse processes including signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, and immunoregulation. It interacts with SIRPA to inhibit dendritic cell maturation and cytokine production, and with SIRPG to enhance T-cell adhesion and activation. Additionally, CD47 plays roles in pulmonary endothelin signaling, nitrous oxide modulation, memory formation, synaptic plasticity, and suppression of angiogenesis, making it a critical target in immunological and cellular research.