Recombinant CAH11 protein (His tag)

Catalog Number	548658
Synonyms	CA-RP XI; CA-XI; CARP XI; Carbonic anhydrase-related protein 2; CA-RP II; CARP-2
Species	Human
Expression System	E. coli
Accession	O75493
Molecular Weight	Predictes a molecular mass of 34.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	33-328
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 33-328 aa (O75493) 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 Carbonic Anhydrase-Related Protein 11 (CA-RP XI) Fragment (residues 33-328) is a high-purity protein designed for investigating the structural and functional roles of the alpha-carbonic anhydrase domain. This 296-amino acid fragment provides researchers with a focused tool to study domain-specific interactions and mechanisms in a catalytically inactive context. Carbonic Anhydrase-Related Protein 11 (CA-RP XI), encoded by the CA11 gene in humans, is a unique member of the carbonic anhydrase family that lacks catalytic activity. Unlike typical carbonic anhydrases, it does not participate in carbon dioxide hydration. The protein is secreted into the extracellular space, suggesting potential roles in cell signaling or regulatory processes. This recombinant fragment encompasses the complete alpha-carbonic anhydrase domain (residues 33-303), enabling targeted research into its structural properties and potential non-enzymatic functions in biological systems.