Recombinant RASA1 protein (His tag)

Catalog Number	546835
Synonyms	GAP; GTPase-activating protein; RasGAP; Ras p21 protein activator; p120GAP
Species	Human
Expression System	E. coli
Accession	P20936
Molecular Weight	Predictes a molecular mass of 32.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	177-442
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 177-442 aa (P20936) 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 Ras GTPase-activating protein 1 (RASA1) fragment (aa 177-442) is a high-purity protein designed for functional studies. This fragment includes the SH2 1, SH3, and SH2 2 domains, making it an ideal tool for investigating domain-specific interactions and regulatory mechanisms in Ras signaling pathways. Ras GTPase-activating protein 1 (RASA1) is a key inhibitory regulator of the Ras-cyclic AMP pathway. It stimulates the GTPase activity of normal Ras p21, thereby promoting the inactive GDP-bound state and downregulating Ras signaling. This regulatory function is critical for controlling cell proliferation and differentiation. The protein is localized in the cytoplasm, where it interacts with signaling components such as NCK1 to enhance its GTPase-activating potential. Dysregulation of RASA1 is implicated in various cellular processes, underscoring its importance in signal transduction research.