Recombinant ARHG3 protein (His tag)

Catalog Number	543717
Synonyms	Exchange factor found in platelets and leukemic and neuronal tissues; XPLN
Species	Human
Expression System	E. coli
Accession	Q9NR81
Molecular Weight	Predictes a molecular mass of 42.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	102-455
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 102-455 aa (Q9NR81) 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	This recombinant protein is a fragment of human Rho guanine nucleotide exchange factor 3 (ARHGEF3), spanning residues 102-455, which fully encompasses the DH and PH functional domains. It serves as a valuable tool for investigating the specific guanine nucleotide exchange factor (GEF) activity of these domains toward RhoA and RhoB GTPases, aiding in studies of cellular signaling and regulation. Rho guanine nucleotide exchange factor 3 (ARHGEF3), also known as XPLN, functions as a guanine nucleotide exchange factor (GEF) that activates RhoA and RhoB GTPases, playing a critical role in modulating cytoskeletal dynamics, cell adhesion, and other Rho-mediated pathways. According to available data, it is localized in the cytoplasm, where it likely influences intracellular signaling networks. This protein is expressed in platelets, leukemic tissues, and neuronal tissues, highlighting its importance in diverse physiological and pathological contexts, such as hematopoiesis and neurological functions.