Recombinant NCF4 protein (His tag)

Catalog Number	545011
Synonyms	NCF-4; Neutrophil NADPH oxidase factor 4; SH3 and PX domain-containing protein 4; p40-phox; p40phox
Species	Human
Expression System	E. coli
Accession	Q15080
Molecular Weight	Predictes a molecular mass of 40.69 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	1-339
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 1-339 aa (Q15080) 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 Neutrophil Cytosol Factor 4 (NCF-4) Fragment (aa 1-339) is a high-purity protein encompassing the full-length PX, SH3, and PB1 domains. This fragment serves as an essential tool for studying domain-specific interactions and mechanisms in NADPH oxidase complex assembly and superoxide production. Neutrophil Cytosol Factor 4 (NCF-4), also known as p40-phox, is a key subunit of the phagocyte NADPH oxidase complex, which transfers electrons from cytosolic NADPH to molecular oxygen to generate superoxide anions—a critical process in microbial defense. The full-length protein localizes primarily to the cytosol and endosome membranes, translocating to the membrane upon activation (e.g., by phorbol myristate acetate), where it contributes to reactive oxygen species production. This recombinant fragment retains the functional domains necessary for investigating NCF-4's role in immune response pathways and oxidative burst mechanisms.