Recombinant CC14A protein (His tag)

Catalog Number	546246
Synonyms	CDC14 cell division cycle 14 homolog A
Species	Human
Expression System	E. coli
Accession	Q9UNH5
Molecular Weight	Predictes a molecular mass of 41.54 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	1-345
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 1-345 aa (Q9UNH5) 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 CDC14A Dual Specificity Protein Phosphatase Fragment (1-345) is a high-purity, functionally active protein designed for studying cell division regulation. This fragment encompasses the essential tyrosine-protein phosphatase domain, making it an ideal tool for investigating centrosome separation, cytokinesis, and mitotic exit mechanisms in vitro. Dual specificity protein phosphatase CDC14A (EC 3.1.3.16/EC 3.1.3.48) is a critical regulator of cell division in humans. It facilitates centrosome separation and productive cytokinesis while promoting mitotic exit through dephosphorylation of key targets like SIRT2 and the APC subunit FZR1/CDH1. The protein localizes dynamically during the cell cycle—residing at centrosomes during interphase, transitioning to spindle poles and the central spindle during mitosis, and is also present in kinocilia and stereocilia of hair cells, linking it to normal hearing function. Its involvement in both cell cycle progression and sensory biology makes it a significant target for cancer and auditory research.