Recombinant LTMD1 protein (His tag)

Catalog Number	545207
Synonyms	Cervical cancer 1 proto-oncogene protein p40; Cervical cancer proto-oncogene 2 protein; HCCR-1; HCRR-2
Species	Human
Expression System	E. coli
Accession	Q6P1Q0
Molecular Weight	Predictes a molecular mass of 24.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	159-360
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 159-360 aa (Q6P1Q0) 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 LETMD1 Fragment (aa 159-360) - A high-purity protein fragment encompassing the complete Letm1 RBD domain, designed for functional studies of mitochondrial regulation, thermogenesis, and cancer-related pathways. This domain-specific construct provides researchers with a targeted tool for investigating LETMD1's role in cellular processes without interference from other protein regions. LETM1 domain-containing protein 1 (LETMD1) plays an essential role in mitochondrial structure and function, particularly in brown adipocyte thermogenesis. The protein localizes to both mitochondrial membranes (outer and inner) as a single-pass membrane protein and also functions in the nucleus, where it interacts with chromatin remodeler SMARCA4 to regulate thermogenic gene expression such as UCP1. LETMD1 is involved in regulating phagocytosis and inflammatory responses to lipopolysaccharide in macrophages and functions as a negative regulator of the p53 tumor suppressor pathway, contributing to its implication in tumorigenesis. The full-length protein's dual localization to mitochondria and nucleus underscores its importance in coordinating metabolic and gene regulatory functions.