# Recombinant PIRC1 protein (His tag)

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| **Catalog Number** | 540449 |
| **Synonyms** | Pierce1; UPF0691 protein C9orf116; p53-induced expression in RB-null cells protein 1 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q5BN46 |
| **Molecular Weight** | Predictes a molecular mass of 13.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band. |

## Product Information

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| **Sequence Region** | 1-106 |
| **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 1-106 aa (Q5BN46) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Introducing the recombinant Pierce1 protein fragment (amino acids 1-106), a stable and soluble unit of the human Piercer of microtubule wall 1 protein. This fragment is ideal for investigating microtubule-associated mechanisms and ciliary function, offering researchers a reliable tool for structural and biochemical studies.<br>The full-length Pierce1 protein, encoded by the PIERCE1 gene in Homo sapiens, is a microtubule inner protein crucial for the attachment of outer dynein arms to dynein-decorated doublet microtubules in cilia axonemes. This function is essential for proper motile cilia beating and plays a role in the initial specification of left-right asymmetry in visceral organs. Pierce1 localizes to the cytoplasm and cytoskeleton, specifically within the axonemes of cilia and flagella, highlighting its importance in cellular motility and developmental processes. |