# Recombinant AN32B protein (His tag)

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| **Catalog Number** | 547863 |
| **Synonyms** | Acidic protein rich in leucines; Putative HLA-DR-associated protein I-2; PHAPI2; Silver-stainable protein SSP29 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q92688 |
| **Molecular Weight** | Predictes a molecular mass of 19.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band. |

## Product Information

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| **Sequence Region** | 1-157 |
| **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 1-157 aa (Q92688) 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** | Recombinant Human ANP32B (Acidic leucine-rich nuclear phosphoprotein 32 family member B) fragment (residues 1-157) is a high-purity, stable protein designed for structural and biochemical research. This fragment represents a soluble and functionally relevant segment of the multifunctional ANP32B protein, which plays critical roles in cell proliferation, apoptosis, transcription regulation, and viral replication. Ideal for studies in molecular biology, immunology, and virology.<br>ANP32B is a multifunctional protein involved in key cellular processes, including cell proliferation, apoptosis, cell cycle progression, and transcription regulation. It acts as a negative regulator of caspase-3-dependent apoptosis and exhibits histone chaperone activity, facilitating histone recruitment to specific promoters to modulate gene expression. Additionally, ANP32B is essential for nucleocytoplasmic transport of specific mRNAs via the XPO1/CRM1 receptor and plays a role in adaptive immune responses. Notably, it is critical for influenza A and B viral genome replication and foamy virus mRNA export. The full-length protein localizes to the nucleus and cytoplasm, with isoform 1 accumulating in nuclei during the S phase, while isoform 2 is cytoplasmic due to the absence of a nuclear localization signal. The recombinant fragment (residues 1-157) was selected computationally for its stability and solubility, enabling detailed structural and functional analyses. |