

## ANP32A Protein, Human, Recombinant (His & GST)

### General Information

Synonyms:	MAPM;PP32;I1PP2A;C15orf1;LANP;HPPCn;PHAPI;acidic (leucine-rich) nuclear phosphoprotein 32 family, member A;PHAP1
Protein Construction:	A DNA sequence encoding the of human ANP32A (NP_006296.1) (Glu 2-Lys 238) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	P39687
Molecular Weight:	55.4 kDa (predicted); 50 kDa (reducing conditions)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing 20 mM Tris, 10% glycerol, 1 mM DTT, 0.5 mM GSH. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

#### Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

#### Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

acidic leucine-rich nuclear phosphoprotein 32 family member A, also known as acidic nuclear phosphoprotein pp32, Leucine-rich acidic nuclear protein, Mapmodulin, Potent heat-stable protein phosphatase 2A inhibitor I1PP2A, Putative HLA-DR-associated protein I, PHAPI and ANP32A, is a nucleus, cytoplasm and endoplasmic

reticulum. ANP32A / LANP is expressed in all tissues tested. It is highly expressed in kidney and skeletal muscle, moderate levels of expression is in brain, placenta and pancreas. ANP32A / LANP is weakly expressed in lung. It is found in all regions of the brain examined (amygdala, caudate nucleus, corpus callosum, hippocampus and thalamus), with highest levels in amygdala. ANP32A / LANP is a component of the SET complex, which also contains SET, APEX1, HMGB2 and NME1. It directly interacts with SET. ANP32A / LANP also interacts with ATXN1/SCA1. ANP32A / LANP is implicated in a number of cellular processes, including proliferation, differentiation, caspase-dependent and caspase-independent apoptosis, suppression of transformation (tumor suppressor), inhibition of protein phosphatase 2A, regulation of mRNA trafficking and stability in association with ELAVL1, and inhibition of acetyltransferases as part of the INHAT (inhibitor of histone acetyltransferases) complex. ANP32A / LANP plays a role in E4F1-mediated transcriptional repression.

### Reference

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