

#### Synonym

Calmodulin binding protein

### Source

Human Neurogranin, His Tag(NEN-H5144) is expressed from E.coli cells. It contains AA Met 1 - Asp 78 (Accession # Q92686).

Predicted N-terminus: His

#### **Molecular Characterization**



Neurogranin(Met 1 - Asp 78) Q92686

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 9.5 kDa. The protein migrates as 15 kDa under reducing (R) condition (SDS-PAGE).

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

# **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in 20 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

# Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

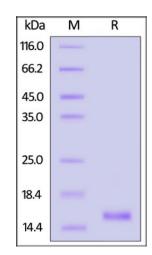
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human Neurogranin, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

# Background

Neurogranin is as a small protein encoded by the NRGN gene. it is a calmodulin-

binding protein expressed primarily in the brain, particularly in dendritic spines, and participating in the protein kinase C signaling pathway. Neurogranin is the main postsynaptic protein regulating the availability of calmodulin, binding to it in the absence of calcium. Phosphorylation by protein kinase C lowers its binding ability. It is a potential biomarker of neurological and mental diseases.

# **Clinical and Translational Updates**

# **Human Neurogranin Protein, His Tag**

Catalog # NEN-H5144



Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.