



Recombinant Protein Technical Manual

Recombinant Human RBBP4/RBAP48 Protein (His Tag)

RPES1502

Product Data:

Product SKU: RPES1502

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_005601.1

Protein Information:

Molecular Mass: 50 kDa

AP Molecular Mass: 50 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM TCEP, 10% glycerol, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: lin-53;NURF55;RBAP48

Immunogen Information:

Sequence: Met 1-Ser 425

Background:

Histone-binding protein RBBP4, also known as Retinoblastoma-binding protein 4, Retinoblastoma-binding protein p48, Chromatin assembly factor 1 subunit C, Chromatin assembly factor I p48 subunit, Nucleosome-remodeling factor subunit RBAP48 and RBBP4, is a nucleus protein which belongs to the WD repeat RBAP46/RBAP48/MSI1 family. RBBP4 is a core histone-binding subunit that may target chromatin assembly factors, chromatin remodeling factors and histone deacetylases to their histone substrates in a manner that is regulated by nucleosomal DNA. RBBP4 is a component of several complexes which regulate chromatin metabolism. These include the chromatin assembly factor 1 (CAF) complex, which is required for chromatin assembly following DNA replication and DNA repair; the core histone deacetylase (HDAC) complex, which promotes histone deacetylation and consequent transcriptional repression; the nucleosome remodeling and histone deacetylase complex (the NuRD complex), which promotes transcriptional repression by histone deacetylation and nucleosome remodeling and the NURF (nucleosome remodeling factor) complex. One common myth is that age-related memory loss is an early indication of Alzheimer's disease. But researchers at the Columbia University Medical Center in New York City have found a specific protein, RbAp48, that they believe is responsible for age-related memory problems. What's more, by replenishing RbAp48 in the brains of mice, the researchers were able to undo existing age-related memory damage. To find RbAp48, researchers focused on the hippocampus, the region of the brain where memories are formed. After studying eight healthy brains donated to science by people between the ages of 33 and 88, they found that RbAp48 was reduced by nearly 50 percent in the older brains. The researchers found that when they turned off RbAp48 in younger mice, they became more forgetful, while increasing RbAp48 in older mice restored memory. The mice were given memory tests that included object recognition and water maze problems.