

Datasheet for ABIN7197706

Retinoblastoma Binding Protein 4 Protein (RBBP4) (His tag)



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Overview

Quantity:	50 µg
Target:	Retinoblastoma Binding Protein 4 (RBBP4)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Retinoblastoma Binding Protein 4 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human RBBP4/RBAP48 Protein (His Tag)
Sequence:	Met 1-Ser 425
Characteristics:	A DNA sequence encoding the full length of human RBBP4 (NP_005601.1) (Met 1-Ser 425) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	Retinoblastoma Binding Protein 4 (RBBP4)
Alternative Name:	RBBP4/RBAP48 (RBBP4 Products)
Background:	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

Target Details

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-1) 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.

Synonym: lin-53;NURF55;RBAP48

Molecular Weight:	50 kDa
NCBI Accession:	NP_005601
Pathways:	Cell Division Cycle , Mitotic G1-G1/S Phases , Stem Cell Maintenance , Chromatin Binding , Protein targeting to Nucleus

Application Details

Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.

Handling

Buffer:	Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 0.5 mM TCEP, 10 % glycerol, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, 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.