Recombinant Mouse RBBP4 Protein (Met1-Ser425), His-tagged

Cat. No. RBBP4-862M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse RBBP4 Protein (NP_033056.2) (Met1-Ser425) was produced by Baculovirus-Insect Cells expression system. This protein was expressed with a polyhistidine tag at the N-terminus.
Species	Mouse
Source	Insect Cells
ProteinLength	Met1-Ser425
Description	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 theWD 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

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	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 5 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.
Predicted N Terminal	His
Form	Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 10 % glycerol, pH 7.5, 0.5 mM TCEP. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant mouse RBBP4 consists of 444 amino acids and predicts a molecular mass of 50 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 90 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated

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	freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4℃ before opening to recover the entire contents.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	Rbbp4 retinoblastoma binding protein 4 [Mus musculus]
Official Symbol	RBBP4
Synonyms	RBBP4; RBBP-4; CAF-I p48; CAF-1 subunit C; CAF-1 p48 subunit; CAF-I 48 kDa subunit; mRbAp48;
Gene ID	19646
mRNA Refseq	NM_009030
Protein Refseq	NP_033056
UniProt ID	Q60972

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