

DESCRIPTION

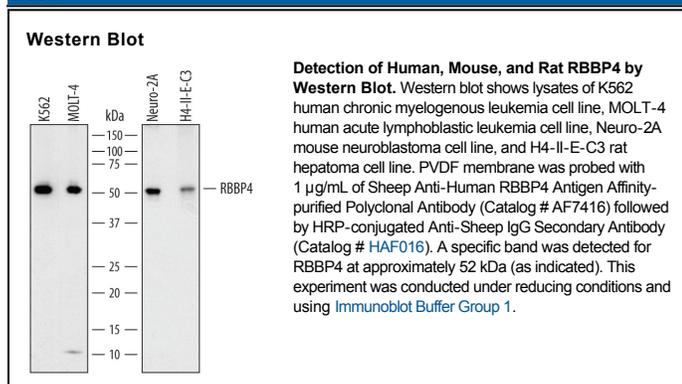
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat RBBP4 in Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human RBBP7 is observed. Detects recombinant human RBBP4 in direct ELISAs. In direct ELISAs, approximately 75% cross-reactivity with recombinant human RBBP7 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RBBP4 Ala2-Ser425 Accession # Q09028
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

RBBP4 (Retinoblastoma-Binding Protein 4; also RbAp48 and CAF-1) is a 48-56 kDa member of the WD Repeat RBAP46/48/MSI1 family of proteins. It is ubiquitously expressed, and acts as a transcriptional repressor. At the start of G1 of the cell cycle, Rb (retinoblastoma protein) normally associates with an E2F transcription complex on E2F responsive genes, blocking E2F activity. At the appropriate time, Rb is phosphorylated, causing its dissociation from E2F and resulting in E2F activation. Dephosphorylated Rb apparently mediates transcriptional repression by recruiting a histone deacetylase (HDAC), followed by HDAC binding to RBBP4. RBBP4, being a histone-binding protein, now brings histones plus HDACs together, resulting in histone deacetylation and gene silencing. Human RBBP4 is 425 amino acids (aa) in length. It contains six WD repeats (aa 122-403), two N-terminal acetylation sites, and two serine phosphorylation sites at positions 110 and 146. There are at least two isoform variants. One contains a six aa substitution for aa 405-425, while another utilizes an alternative start site at Met36. Human and mouse RBBP4 are identical in aa sequence.