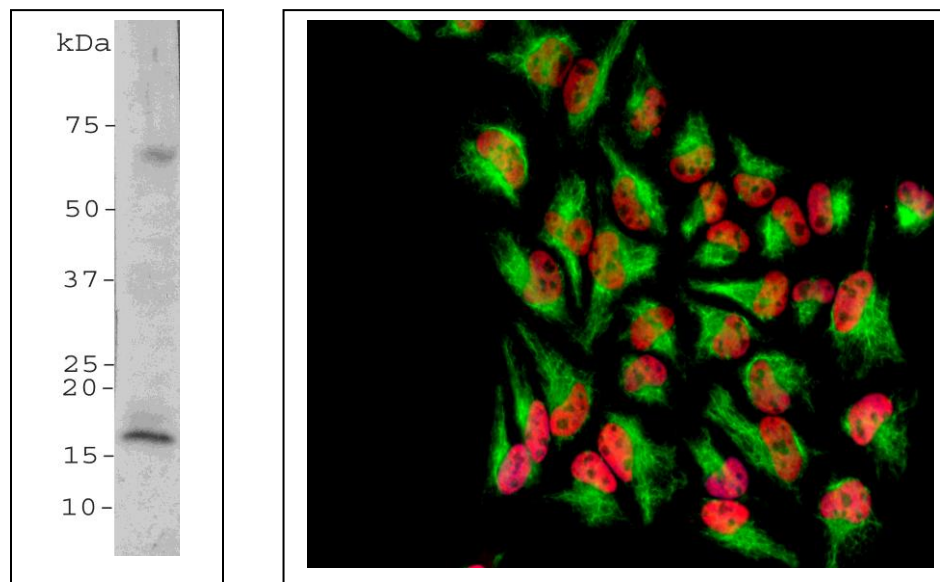


Catalogue RPCA-RBM3: Rabbit Polyclonal Antibody to RBM3

The Immunogen: The RNA binding motif protein 3, RBM3, is a glycine rich protein containing a RNA-recognition motif (RRM) through which it binds to both to DNA and RNA. Initially identified in human fetal brain tissue by Derry *et al* in 1995, the gene encoding RBM3 maps to human chromosome X induced by cold shock and low oxygen tension. The RBM3 gene encode alternatively spliced transcripts in a variety of human tissues with the longest open reading frame encoding a 157-amino acid protein with a predicted molecular weight of 17 kD (1). RBM3 is thought to function as a proto-oncogene, possibly playing a role in tumor transformation and metastasis (2,3). In a recent study, Peretti *et al* demonstrated that deficient synapse regeneration, mediated at least in part by failure of the RBM3 stress response, contributes to synapse loss throughout the course of neurodegenerative disease, indicating RBM3 may play an important role in synapse regeneration in brain (4). RPCA-RBM3 was raised against full length recombinant human RBM3 expressed and purified from *E. coli*. The [HGNC](#) name for this protein is [RBM3](#).



Figures: Left: Blot of crude HeLa cell homogenate blotted with RPCA-RBM3. The polyclonal antibody binds to a band at about 17 kDa. **Right:** HeLa cell cultures were stained with RPCA-RBM3 antibody (red). RBM3 localized in nucleus of HeLa cells. Cells were counterstained with our chicken polyclonal antibody to vimentin [CPCA-Vim](#) in green. Blue is a DNA stain.

Antibody Characteristics: Antibody was raised in rabbit against a recombinant full length RBM3 protein expressed in and purified from *E. coli*. Antibody is provided as crude rabbit serum.

Suggestions for use: In western blotting using chemiluminescence it can be used at dilutions of 1:500-1,000. In immunofluorescence, try at 1:1,000-5,000. Avoid repeated freezing and thawing, store at 4°C or -20°C.

References:

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- 2: Wellmann S, Truss M, Bruder E, Tornillo L, Zelmer A, Seeger K, Bühler C. The RNA-Binding Protein RBM3 Is required for cell proliferation and protects against serum deprivation-Induced cell death. Hum. Pediatr Res. 67(1):35-41 (2010)
- 3: Hjelm B, Brennan DJ, Zendeckrokh N, Eberhard J, Nodin B, Gaber A, Pontén F, Johannesson H, Smaragdi K, Frantz C, Hober S, Johnson LB, Pålman S, Jirstrom K, Uhlen M. High nuclear RBM3 expression is associated with an improved prognosis in colorectal cancer. Proteomics Clin Appl. 5(11-12):624-35 (2011)
- 4: Peretti D, Bastide A, Radford H, Verity N, Molloy C, Martin MG, Moreno JA, Steinert JR, Smith T, Dinsdale D, Willis AE, Mallucci GR. RBM3 mediates structural plasticity and protective effects of cooling in neurodegeneration . Nature.12; 518(7538): 236–239 (2015)

Limitations: This product is for research use only and is not approved for use in humans or in clinical diagnosis.

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