

#8588 Store at -20°C

hnRNP Q/R (D18B2) Rabbit mAb


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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	65-82	Rabbit IgG	#O43390, #O60506	10236, 10492

Product Usage Information

Application

 Western Blotting
Immunoprecipitation

Dilution

 1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

hnRNP Q/R (D18B2) Rabbit mAb recognizes endogenous levels of total hnRNP Q and hnRNP R proteins.

Source / Purification

Monoclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys371 of human hnRNP Q protein.

Background

Heterogeneous nuclear ribonucleoprotein Q and R belong to a family of hnRNP proteins that are involved in RNA binding, RNA biosynthesis, and mRNA transport from the nucleus to the cytoplasm (1-3). These two proteins are encoded by different genes but have 83% homology. hnRNP Q has three alternative splice variants (hnRNP Q1-3) (1-3). Methylation of carboxy-terminal arginine residues is required for nuclear localization (4). hnRNP Q binds to AU-rich mRNA in conjunction with AUF1 and regulates mRNA decay (5). hnRNP Q isoforms play a crucial role in mediating nuclear function of survival of motor neuron (SMN) complex (6,7) and modulating RNA biosynthesis and hepatitis C virus replication (8). hnRNP R was identified recently and its function is still under investigation (9), however hnRNP R does not duplicate the biological function of hnRNP Q. Both hnRNP Q and R are present in cytoplasmic mRNP granules containing untranslated mRNAs (10) and both interact with SMN (6).

Background References

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3. Krecic, A.M. and Swanson, M.S. (1999) *Curr Opin Cell Biol* 11, 363-71.
4. Passos, D.O. et al. (2006) *Biochem Biophys Res Commun* 346, 517-25.
5. Moraes, K.C. et al. (2003) *Biol Chem* 384, 25-37.
6. Mourelatos, Z. et al. (2001) *EMBO J* 20, 5443-52.
7. Rossoll, W. et al. (2002) *Hum Mol Genet* 11, 93-105.
8. Liu, H.M. et al. (2009) *Virology* 386, 249-56.
9. Hassfeld, W. et al. (1998) *Nucleic Acids Res* 26, 439-45.
10. Carty, S.M. and Greenleaf, A.L. (2002) *Mol Cell Proteomics* 1, 598-610.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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