

#4699 Store at -20°C

hnRNP K (A222) Antibody


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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	58-62	Rabbit	#P61978	3190

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	hnRNP K (A222) Antibody detects endogenous levels of total hnRNP K protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala222 of human hnRNP K protein. Antibodies were purified by protein A and peptide affinity chromatography.	
Background	<p>Heterogeneous nuclear ribonucleoprotein K (hnRNP K) belongs to a family of RNA binding multiprotein complexes (hnRNP proteins) that facilitate pre-mRNA processing and transport of mRNA from the nucleus to cytoplasm (1-3). hnRNP K contains three unique structural motifs termed KH domains that bind poly(C) DNA and RNA sequences (4,5). Intricate architecture enables hnRNP K to facilitate mRNA biosynthesis (6), transcriptional regulation (7), and signal transduction. Research studies have shown that cytoplasmic hnRNP K expression is increased in oral squamous cell carcinoma and pancreatic cancer, and may be a potential prognostic factor (8,9). hnRNP K coordinates with p53 to regulate its target gene transcription in response to DNA damage. Proteasome degradation of hnRNP K is mediated by E3 ligase MDM2 (10). The interaction between hnRNP K and c-Src leads to hnRNP K phosphorylation, which allows for hnRNP K activation of silenced mRNA translation (11).</p>	
Background References	<ol style="list-style-type: none"> 1. Dreyfuss, G. et al. (1993) <i>Annu Rev Biochem</i> 62, 289-321. 2. Siomi, H. et al. (1994) <i>Cell</i> 77, 33-9. 3. Miao, L.H. et al. (1998) <i>J Biol Chem</i> 273, 10784-91. 4. Tomonaga, T. and Levens, D. (1995) <i>J Biol Chem</i> 270, 4875-81. 5. Choi, H.S. et al. (2009) <i>Biochem Biophys Res Commun</i> 380, 431-6. 6. Bustelo, X.R. et al. (1995) <i>Mol Cell Biol</i> 15, 1324-32. 7. Michelotti, E.F. et al. (1996) <i>Mol Cell Biol</i> 16, 2350-60. 8. Zhou, R. et al. (2010) <i>Int J Cancer</i> 126, 395-404. 9. Matta, A. et al. (2009) <i>Int J Cancer</i> 125, 1398-406. 10. Moumen, A. et al. (2005) <i>Cell</i> 123, 1065-78. 11. Ostareck-Lederer, A. et al. (2002) <i>Mol Cell Biol</i> 22, 4535-43. 	

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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
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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