

hnRNP U Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52737**Specification**

hnRNP U Antibody - Product Information

Application	WB
Primary Accession	Q00839
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	110 KDa

hnRNP U Antibody - Additional Information**Gene ID** 3192**Other Names**

Heterogeneous nuclear ribonucleoprotein U;hnRNP U protein;HNRNPU;hnRNPU protein;HNRPU;HNRPU_HUMAN;p120;p120 nuclear protein;SAF A;SAF-A;SAFA;Scaffold attachment factor A;U21.1.

Dilution

WB~~1:1000

Format

Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.09% (W/V) sodium azide, 50% glycerol

Storage

Store at -20 °C.Stable for 12 months from date of receipt

hnRNP U Antibody - Protein Information**Name** HNRNPU ([HGNC:5048](#))**Function**

DNA- and RNA-binding protein involved in several cellular processes such as nuclear chromatin organization, telomere-length regulation, transcription, mRNA alternative splicing and stability, Xist-mediated transcriptional silencing and mitotic cell progression (PubMed:10490622, PubMed:18082603, PubMed:19029303, PubMed:22325991, PubMed:25986610, PubMed:28622508). Plays a role in the regulation of interphase large-scale gene-rich chromatin organization through chromatin-associated RNAs (caRNAs) in a transcription-dependent manner, and thereby maintains

<http://www.uniprot.org/citations/9204873> target="_blank">9204873, PubMed:9405365. Binds to chromatin-associated RNAs (caRNAs) (PubMed:28622508). Associates with chromatin to scaffold/matrix attachment region (S/MAR) elements in a chromatin-associated RNAs (caRNAs)-dependent manner (PubMed:10671544, PubMed:11003645, PubMed:11909954, PubMed:1324173, PubMed:28622508, PubMed:7509195, PubMed:9204873, PubMed:9405365). Binds to the Xist RNA (PubMed:26244333). Binds the long non-coding H19 RNA (PubMed:23811339). Binds to SMN1/2 pre-mRNAs at G/U-rich regions (PubMed:22325991). Binds to small nuclear RNAs (snRNAs) (PubMed:22325991). Binds to the 3'-UTR of TNFA mRNA (PubMed:17174306). Binds (via RNA-binding RGG-box region) to the long non-coding Xist RNA; this binding is direct and bridges the Xist RNA and the inactive chromosome X (Xi) (By similarity). Also negatively regulates embryonic stem cell differentiation upon LIF signaling (By similarity). Required for embryonic development (By similarity). Binds to brown fat long non-coding RNA 1 (Blnc1); facilitates the recruitment of Blnc1 by ZBTB7B required to drive brown and beige fat development and thermogenesis (By similarity).

Cellular Location

Nucleus. Nucleus matrix. Chromosome. Nucleus speckle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Midbody. Cytoplasm Cell surface. Cytoplasmic granule. Note=Localizes at inactive X chromosome (Xi) regions (PubMed:11003645, PubMed:14608463, PubMed:15563465) Localizes in the nucleus during interphase (PubMed:21242313). At metaphase, localizes with mitotic spindle microtubules (MTs) (PubMed:21242313). At anaphase, localizes in the mitotic spindle midzone (PubMed:21242313). Localizes in spindle MTs proximal to spindle poles in a TPX2- and AURKA-dependent manner (PubMed:21242313). The Ser- 59 phosphorylated form localizes to centrosomes during prophase and metaphase, to mitotic spindles in anaphase and to the midbody during cytokinesis (PubMed:25986610). Colocalizes with SMARCA4 in the nucleus (By similarity). Colocalizes with CBX5 in the nucleus (PubMed:19617346). Colocalizes with NR3C1 in nuclear speckles (PubMed:9353307). Localized in cytoplasmic ribonucleoprotein (RNP) granules containing untranslated mRNAs (PubMed:17289661) {ECO:0000250|UniProtKB:Q8VEK3, ECO:0000269|PubMed:11003645, ECO:0000269|PubMed:14608463, ECO:0000269|PubMed:15563465, ECO:0000269|PubMed:17289661, ECO:0000269|PubMed:19617346, ECO:0000269|PubMed:21242313, ECO:0000269|PubMed:25986610, ECO:0000269|PubMed:9353307}

Tissue Location

Widely expressed..

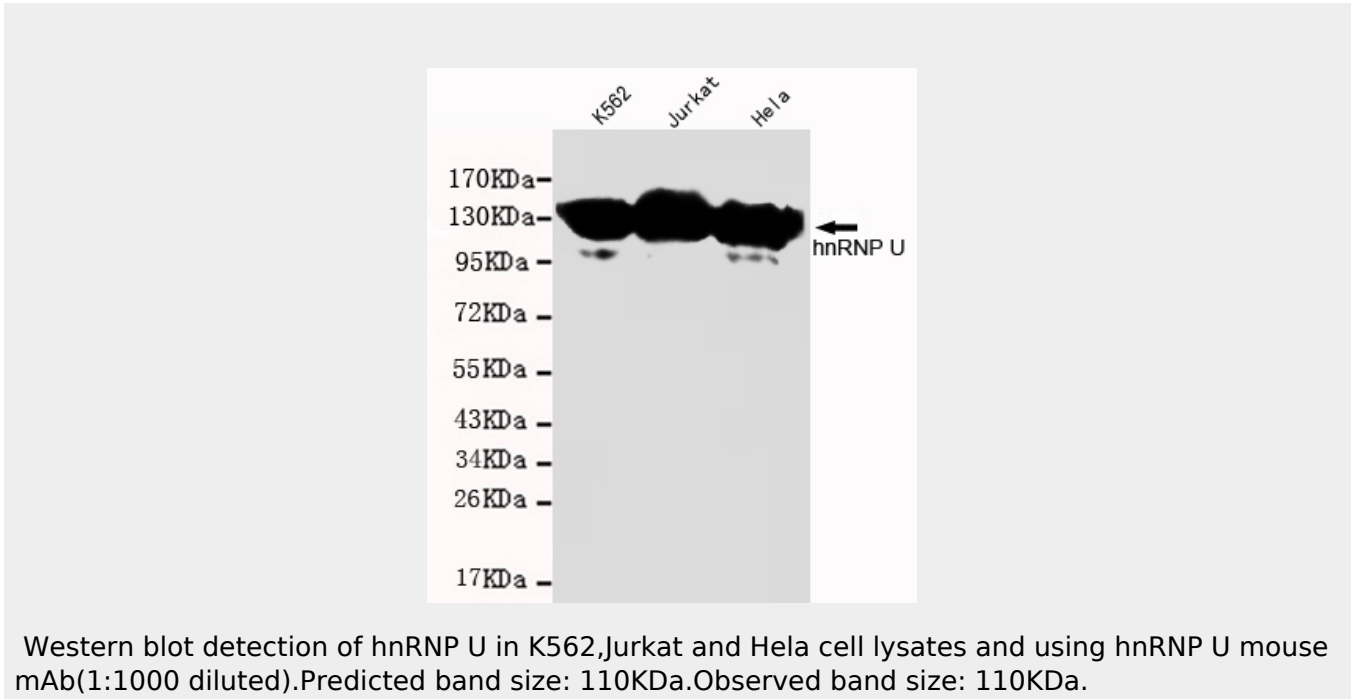
hnRNP U Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

hnRNP U Antibody - Images



hnRNP U Antibody - Background

Component of the CRD-mediated complex that promotes MYC mRNA stabilization. Binds to pre-mRNA. Has high affinity for scaffold-attached region (SAR) DNA. Binds to double- and single-stranded DNA and RNA. Plays a role in the circadian regulation of the core clock component ARNTL/BMAL1 transcription (By similarity).

hnRNP U Antibody - References

- Kiledjian M., et al. EMBO J. 11:2655-2664(1992).
Fackelmayer F.O., et al. Biochim. Biophys. Acta 1217:232-234(1994).
Fackelmayer F.O., et al. Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
Gregory S.G., et al. Nature 441:315-321(2006).
Jordan P., et al. Biochemistry 33:14696-14706(1994).