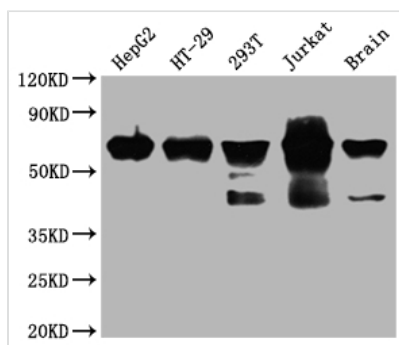




# DDX5 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA231179A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P17844
<b>Immunogen</b>	A synthesized peptide derived from human DDX5
<b>Species Reactivity</b>	Human, Mouse
<b>Tested Applications</b>	ELISA, WB, IHC, IF, FC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200, FC:1:20-1:200
<b>Relevance</b>	Involved in the alternative regulation of pre-mRNA splicing; its RNA helicase activity is necessary for increasing tau exon 10 inclusion and occurs in a RBM4-dependent manner. Binds to the tau pre-mRNA in the stem-loop region downstream of exon 10. The rate of ATP hydrolysis is highly stimulated by single-stranded RNA. Involved in transcriptional regulation; the function is independent of the RNA helicase activity. Transcriptional coactivator for estrogen receptor ESR1 and androgen receptor AR. Increases ESR1 AF-1 domain-mediated transactivation and ESR1 AF-1 and AF-2 domains transcriptional synergistic activity. Synergizes with DDX17 and SRA1 RNA to activate MYOD1 transcriptional activity and involved in skeletal muscle differentiation. Transcriptional coactivator for p53/TP53 and involved in p53/TP53 transcriptional response to DNA damage and p53/TP53-dependent apoptosis. Transcriptional coactivator for RUNX2 and involved in regulation of osteoblast differentiation. Acts as transcriptional repressor in a promoter-specific manner; the function probably involves association with histone deacetylases, such as HDAC1. As component of a large PER complex is involved in the inhibition of 3' transcriptional termination of circadian target genes such as PER1 and NR1D1 and the control of the circadian rhythms.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling
<b>Gene Names</b>	DDX5
<b>Clone No.</b>	2C3
<b>Image</b>	



#### Western Blot

Positive WB detected in: HepG2 whole cell lysate, HT-29 whole cell lysate, 293T whole cell lysate, Jurkat whole cell lysate, Mouse brain tissue

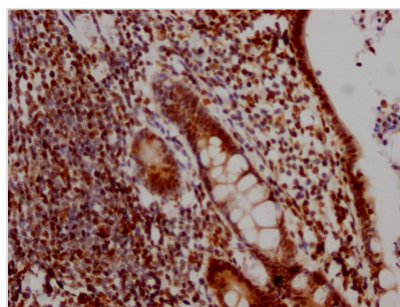
All lanes: DDX5 antibody at 1:2000

Secondary

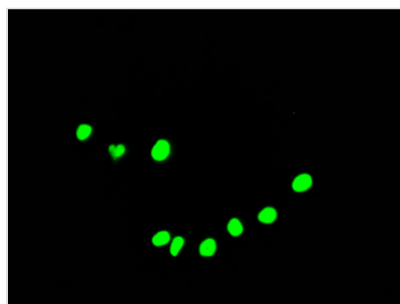
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 70, 61 kDa

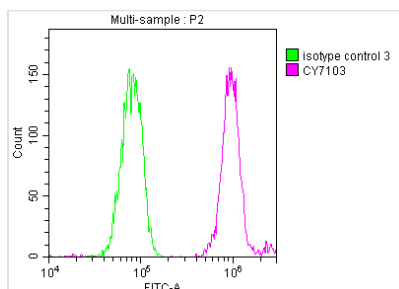
Observed band size: 70 kDa



IHC image of CSB-RA231179A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4<sup>o</sup> overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HepG2 Cells with CSB-RA231179A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4<sup>o</sup>. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Overlay histogram showing Hela cells stained with CSB-RA231179A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1 $\mu$ g/1 $\times$ 10<sup>6</sup> cells) for 1 h at 4<sup>o</sup>. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4<sup>o</sup>. Control antibody (green line) was Rabbit IgG (1 $\mu$ g/1 $\times$ 10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

## Description

DDX5 is an ATP-dependent RNA helicase involved in splicing, mRNA export, transcript stability, rRNA biosynthesis, and microRNA processing, among other RNA-related events. DDX5 has been connected to the regulation of numerous cancer-related pathways and has been found to be abnormally expressed in many cancers. DDX5 is closely linked to carcinogenesis, invasiveness, and metastasis, as well as cancer proliferation in several cancers. Dysfunction of



DDX5 is ultimately associated with tumor formation and progression.

CUSABIO designed the vector clones for the expression of a recombinant DDX5 antibody in mammalian cells. The vector clones were obtained by inserting the DDX5 antibody heavy and light chains into the plasma vectors. The recombinant DDX5 antibody was purified from the culture medium through Affinity-chromatography. It can be used to detect DDX5 protein from Human, Mouse in the ELISA, WB, IHC, IF, FC.