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DDX54 Polyclonal Antibody

Catalog # AP69499

Product Information

Application	WB, E
Primary Accession	Q8TDD1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98595

Additional Information

Gene ID	79039
Other Names	DDX54; ATP-dependent RNA helicase DDX54; ATP-dependent RNA helicase DP97; DEAD box RNA helicase 97 kDa; DEAD box protein 54
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

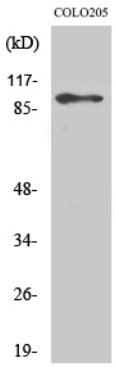
Name	DDX54
Function	Nucleolar RNA helicase that is involved in diverse cellular processes including ribosome biogenesis, DNA damage response, RNA splicing, transcriptional regulation, innate immunity, and nervous system development. Plays an essential role in the formation of the ribosome active site by remodeling rRNA structure and initiating peptidyl transferase center formation (PubMed:38632236). Represses the transcriptional activity of several nuclear receptors. Regulates transcriptome dynamics during DNA damage response. Mechanistically, acts via increased interaction with a well-defined class of pre-mRNAs that contain introns with weak acceptor splice sites, as well as by protein-protein contacts within components of U2 snRNP and spliceosomal B complex. These activities lead to reduced intron retention and enhanced processing rates of its target transcripts (PubMed:28596291). Acts as an inhibitor of type I interferon antiviral response by facilitating ALKBH5-mediated demethylation of specific transcripts (PubMed:40793791). Contributes to central nervous system myelination, likely through regulation of oligodendrocyte differentiation and myelin sheath formation (By similarity).

Cellular Location	Nucleus, nucleolus. Nucleus, nucleoplasm Note=Relocates from the nucleolus to the nucleoplasm upon viral infection.
Tissue Location	Expressed in the fallopian tube, cervix and uterus. Also expressed in the brain.

Background

Has RNA-dependent ATPase activity. Represses the transcriptional activity of nuclear receptors.

Images



Western Blot analysis of various cells using DDX54 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.