

### Product datasheet for TP304171M

#### OriGene Technologies, Inc.

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## DDX3 (DDX3X) (NM\_001356) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked (DDX3X),

100 µg

Species: Human Expression Host: HEK293T

**Expression cDNA Clone** >RC204171 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSHVAVENALGLDQQFAGLDLNSSDNQSGGSTASKGRYIPPHLRNREATKGFYDKDSSGWSSSKDKDAYS SFGSRSDSRGKSSFFSDRGSGSRGRFDDRGRSDYDGIGSRGDRSGFGKFERGGNSRWCDKSDEDDWSKPL PPSERLEQELFSGGNTGINFEKYDDIPVEATGNNCPPHIESFSDVEMGEIIMGNIELTRYTRPTPVQKHA IPIIKEKRDLMACAQTGSGKTAAFLLPILSQIYSDGPGEALRAMKENGRYGRRKQYPISLVLAPTRELAV QIYEEARKFSYRSRVRPCVVYGGADIGQQIRDLERGCHLLVATPGRLVDMMERGKIGLDFCKYLVLDEAD RMLDMGFEPQIRRIVEQDTMPPKGVRHTMMFSATFPKEIQMLARDFLDEYIFLAVGRVGSTSENITQKVV WVEESDKRSFLLDLLNATGKDSLTLVFVETKKGADSLEDFLYHEGYACTSIHGDRSQRDREEALHQFRSG KSPILVATAVAARGLDISNVKHVINFDLPSDIEEYVHRIGRTGRVGNLGLATSFFNERNINITKDLLDLL VEAKQEVPSWLENMAYEHHYKGSSRGRSKSSRFSGGFGARDYRQSSGASSSSFSSSRASSSRSGGGHGS SRGFGGGGYGGFYNSDGYGGNYNSQGVDWWGN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 73.1 kDa

**Concentration:** >0.1 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol Bioactivity: Biolayer interferometry (BLI) assay (PMID: 25496916)

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.





#### DDX3 (DDX3X) (NM\_001356) Human Recombinant Protein - TP304171M

Storage: Store at -80°C.

Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 001347

Locus ID: 1654
UniProt ID: 000571
RefSeq Size: 5433
Cytogenetics: Xp11.4
RefSeq ORF: 1986

Synonyms: CAP-Rf; DBX; DDX3; DDX14; HLP2; MRX102; MRXSSB

**Summary:** The protein encoded by this gene is a member of the large DEAD-box protein family, that is

defined by the presence of the conserved Asp-Glu-Ala-Asp (DEAD) motif, and has ATP-

dependent RNA helicase activity. This protein has been reported to display a high level of RNA-independent ATPase activity, and unlike most DEAD-box helicases, the ATPase activity is thought to be stimulated by both RNA and DNA. This protein has multiple conserved domains

and is thought to play roles in both the nucleus and cytoplasm. Nuclear roles include transcriptional regulation, mRNP assembly, pre-mRNA splicing, and mRNA export. In the cytoplasm, this protein is thought to be involved in translation, cellular signaling, and viral replication. Misregulation of this gene has been implicated in tumorigenesis. This gene has a paralog located in the nonrecombining region of the Y chromosome. Pseudogenes sharing similarity to both this gene and the DDX3Y paralog are found on chromosome 4 and the X chromosome. Alternative splicing results in multiple transcript variants. [provided by RefSeq,

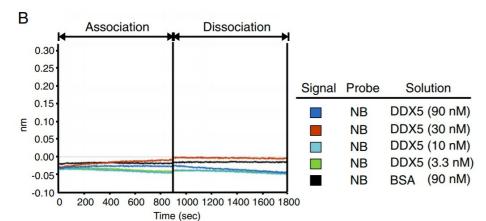
Oct 2014]

**Protein Families:** ES Cell Differentiation/IPS

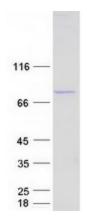
**Protein Pathways:** RIG-I-like receptor signaling pathway



# **Product images:**



DDX5 interacts with Nullbasic in vitro, as measured by the Octet Red system. Biotinylated recombinant Nullbasic-FLAG-V5-6-His was bound to a streptavidin biosensor and applied to solutions containing 3.3, 10, 30 or 90 nM of human recombinant Myc-DDK-tagged DDX5 (OriGene [TP304171]). BSA served as a control. Figure cited from Retrovirology, PMID: 25496916



Coomassie blue staining of purified DDX3X protein (Cat# [TP304171]). The protein was produced from HEK293T cells transfected with DDX3X cDNA clone (Cat# [RC204171]) using MegaTran 2.0 (Cat# [TT210002]).