

Product datasheet for PH304837

DHX58 (NM_024119) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	DHX58 MS Standard C13 and N15-labeled recombinant protein (NP_077024)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC204837
Predicted MW:	76.6 kDa
Protein Sequence:	>RC204837 protein sequence Red=Cloning site Green=Tags(s)

MELRSYQWEVIMPALLEGKNI I IWLPTGAGKTRAAAYVAKRHLETVDGAKVVVLVNRVHLVTQHGEFFRRM
LDGRWTVTTLSGDMGPRAGFGHLARCHDLLICTAELLQMALTSPEEEHVELTVFSLIVVDECHHTHKDT
VYNVIMSQYLELKLQRAQPLPQVLGLTASPGTGGASKLDGAINHVLQLCANLDTWCIMSPQNCPPQLQEH
SQQPCKQYNLCHRRSQDPFGDLLKKLMDQIHDHLEMPELSRKFGTQMYEQVVKLSEAAALAGLQEQRVY
ALHLRRYNDALLIHDTVRAVDALAALQDFYHREHVTKTQILCAERRLLALFDDRKNELAHLATHGPNPK
LEMLEKILQRQFSSSNSPRGIIFTRTRQSAHLLLLWLQQQGLQTVDIRAQLLIGAGNSSQSTHMTQRDQ
QEVIQKFQDGTLLNLLVATSVAAEGLDIPHCNVVRYGLL TNEISMVQARGRARADQSVYAFVATEGSREL
KRELINAELETLMQAVAAVQKMDQAEYQAKIRDLLQQAALTKRAAQAAQRENQRQFPVEHVQLLCINCM
VAVGHGSDLRKVEGTHHVNVNPNFSNYYNVSRDPVINKVFKDWKPGGVI SCRNCGEVWGLQMIYKSVKL
PVLKVRSMLETPQGRIQAKKWSRVPFVSPDFDFLQHCAENLSDLSLD

SGP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_077024
RefSeq Size:	2631



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RefSeq ORF: 2034

Synonyms: D11LGP2; D11lgp2e; LGP2; RLR-3

Locus ID: 79132

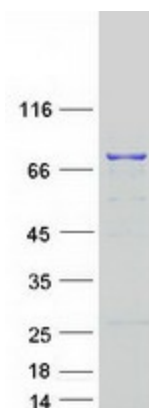
UniProt ID: [Q96C10](#), [A0A024R1Y5](#)

Cytogenetics: 17q21.2

Summary: Acts as a regulator of DDX58/RIG-I and IFIH1/MDA5 mediated antiviral signaling. Cannot initiate antiviral signaling as it lacks the CARD domain required for activating MAVS/IPS1-dependent signaling events. Can have both negative and positive regulatory functions related to DDX58/RIG-I and IFIH1/MDA5 signaling and this role in regulating signaling may be complex and could probably depend on characteristics of the infecting virus or target cells, or both. Its inhibitory action on DDX58/RIG-I signaling may involve the following mechanisms: competition with DDX58/RIG-I for binding to the viral RNA, binding to DDX58/RIG-I and inhibiting its dimerization and interaction with MAVS/IPS1, competing with IKBKE in its binding to MAVS/IPS1 thereby inhibiting activation of interferon regulatory factor 3 (IRF3). Its positive regulatory role may involve unwinding or stripping nucleoproteins of viral RNA thereby facilitating their recognition by DDX58/RIG-I and IFIH1/MDA5. Involved in the innate immune response to various RNA viruses and some DNA viruses such as poxviruses, and also to the bacterial pathogen *Listeria monocytogenes*. Can bind both ssRNA and dsRNA, with a higher affinity for dsRNA. Shows a preference to 5'-triphosphorylated RNA, although it can recognize RNA lacking a 5'-triphosphate.[UniProtKB/Swiss-Prot Function]

Protein Pathways: RIG-I-like receptor signaling pathway

Product images:



Coomassie blue staining of purified DHX58 protein (Cat# [TP304837]). The protein was produced from HEK293T cells transfected with DHX58 cDNA clone (Cat# [RC204837]) using MegaTran 2.0 (Cat# [TT210002]).