

Recombinant Human DGCR8 protein ab153373

1 Image

Description

Product name	Recombinant Human DGCR8 protein
Expression system	Wheat germ
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<div>METDESPSPLPCGPAGEAVMESRARPFQALPREQSPPP PLQTSSGAEVMD VGSGGDGQSELPAEDPFNFYGASLLSKGSFSKGRLLIDP NCSGHSPTAR HAPAVRKFSDDLKLLKDKISVSFTESCRSKDRKVLYTGA ERDVRAECGL LLSPVSGDVHACPFGGSVGDGVGIGGESADKKDEENEL DQEKREYAVLD ELEDFTDNLELDEEGAGGFTAKAVQRDRVDEEALNFPYE DDFDNDVDAL LEEGLCAPKKRRTTEEKYGGSDHPSDGETSVQPMMTKIK TVLKSRRPPT EPLPDGWMFTFHNSGVPVYLHRESRVVTWSRPYFLGTGSI RKHDPPLSSI PCLHYKKMKDNEEREQSSDLTPSGDVSPVKPLSRSAELE FPLDEPDSMGA DPGPPDEKDPLGAEAAPGALGQVKAKVEVCKDESVDLE EFRSYLEKRFDF EQVTVKKFRTWAERRQFNREMKRKQAESERPILPANQKLI TLVQDAPTK KEFVINPNGKSEVCILHEYMQRVLKVRPVYNFFECENPSE PFGASVTIDG VTYSGTASSKKLAKNKAARATLEILIPDFVKQTSEEKPKD SEELEYFNH ISIEDSRVYELTSKAGLLSPYQILHECLKRNHGMGDTSIKFE VVPGKNQK SEYVMACGKHTVRGWCKNKRVGKQLASQKILQLLHPHVK NWGSLLRMYGR ESSKMVKQETSDKSVIELQQYAKKNKPNLHILSKLQEEMK</div>

Amino acids	1 to 773
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab153373** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot
	ELISA
Form	Liquid
Additional notes	

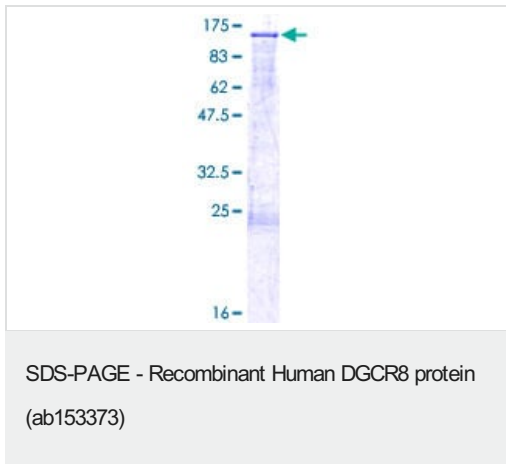
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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General Info

Function	Component of the microprocessor complex that acts as a RNA- and heme-binding protein that is involved in the initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that is required to process primary miRNA transcripts (pri-miRNAs) to release precursor miRNA (pre-miRNA) in the nucleus. Within the microprocessor complex, DGCR8 function as a molecular anchor necessary for the recognition of pri-miRNA at dsRNA-ssRNA junction and directs DROSHA to cleave 11 bp away from the junction to release hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate mature miRNAs. The heme-bound DGCR8 dimer binds pri-miRNAs as a cooperative trimer (of dimers) and is active in triggering pri-miRNA cleavage, whereas the heme-free DGCR8 monomer binds pri-miRNAs as a dimer and is much less active. Both double-stranded and single-stranded regions of a pri-miRNA are required for its binding. Involved in the silencing of embryonic stem cells self-renewal.
Tissue specificity	Ubiquitously expressed.
Sequence similarities	Contains 2 DRBM (double-stranded RNA-binding) domains. Contains 1 WW domain.
Domain	Both DRBM domains are required for efficient binding to pri-miRNA. The region between residues 276 and 498 has an autoinhibitory function on pri-miRNA processing activity.
Cellular localization	Nucleus. Nucleus > nucleolus. Colocalizes with nucleolin and DROSHA in the nucleolus. Mostly detected in the nucleolus as electron-dense granular patches around the fibrillar center (FC) and granular component (GC). Also detected in the nucleoplasm as small foci adjacent to splicing speckles near the chromatin structure. Localized with DROSHA in GW bodies (GWBs), also known as P-bodies.

Images



ab153373 on a 12.5% SDS-PAGE stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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