

DGCR8 Rabbit mAb

Catalog No: #52251

Package Size: #52251-1 50ul #52251-2 100ul

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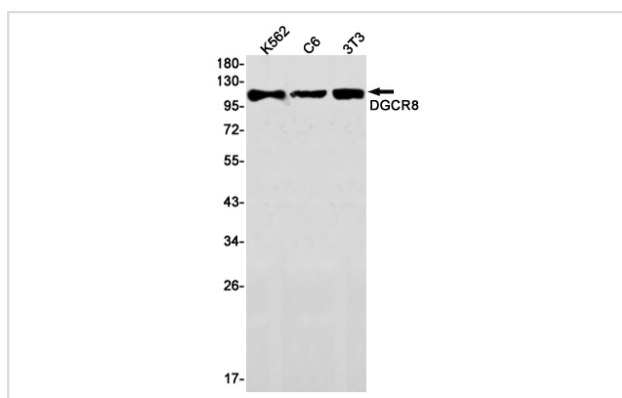
Description

Product Name	DGCR8 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S05-5A6
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB
Species Reactivity	Human,Mouse,Rat
Immunogen Description	Recombinant protein of human DGCR8
Conjugates	Unconjugated
Modification	Unmodification
Other Names	DGCR8; DGCRK6; Gy1 ; C22orf12; D16Wis2; pasha;
Accession No.	Swiss-Prot:Q8WYQ5GeneID:54487
Uniprot	Q8WYQ5
GeneID	54487
Calculated MW	Calculated MW: 86 kDa; Observed MW: 120 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Application Details

WB: 1/1000;

Images



Western blot detection of DGCR8 in K562,C6,3T3 cell lysates using DGCR8 Rabbit mAb(1:1000 diluted).Predicted band size:86kDa.Observed band size:120kDa.

Background

Swiss-Prot Acc.Q8WYQ5. 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 (PubMed:26027739, PubMed:26748718). 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 (PubMed:15531877, PubMed:15574589, PubMed:15589161, PubMed:16751099, PubMed:16906129, PubMed:16963499, PubMed:17159994). Specifically recognizes and binds N6-methyladenosine (m6A)-containing pri-miRNAs, a modification required for pri-miRNAs processing (PubMed:25799998). Involved in the silencing of embryonic stem cell self-renewal .

Note: This product is for in vitro research use only