

DGCR8 antibody

Product Information

Catalog No.:	FNab02353
Size:	100µg
Form:	liquid
Purification:	Protein A+G purification
Purity:	≥95% as determined by SDS-PAGE
Host:	Mouse
Clonality:	monoclonal
Clone ID:	2G8
IsoType:	IgG1
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

Background

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(By similarity).

Immunogen information

Immunogen:	DiGeorge syndrome critical region gene 8
Synonyms:	Microprocessor complex subunit DGCR8 DiGeorge syndrome critical region 8 DGCR8 C22orf12 DGCRK6

Observed MW: 120 kDa
Uniprot ID : Q8WYQ5

Application

Reactivity: Human, Mouse

Tested Application: ELISA, WB, IP

Recommended dilution: WB: 1:500-1:2000; IP: 1:500-1:1000

Image:

