

# **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 form 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 primiRNAs 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 selfrenewal(By similarity).

### Immunogen information

Immunogen: DiGeorge syndrome critical region gene 8

Synonyms: Microprocessor complex subunit DGCR8|DiGeorge syndrome critical

region 8|DGCR8|C22orf12|DGCRK6



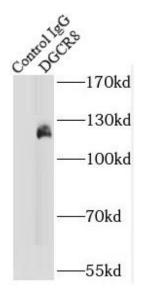
Observed MW: 120 kDa
Uniprot ID: Q8WYQ5

## **Application**

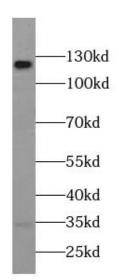
Reactivity: Human, Mouse
Tested Application: ELISA, WB, IP

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

Image:



IP Result of anti-DGCR8 (IP:FNab02353, 5ug; Detection:FNab02353 1:500) with K-562 cells lysate 3440ug.



K-562 cells were subjected to SDS PAGE followed by western blot with FNab02353(DGCR8 antibody) at dilution of 1:1000