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Rabbit Anti-DGCR8 antibody

SL14293R

Product Name	DGCR8
Chinese Name	狄乔治(DiGeorge)氏综合征相关蛋白 8 抗体
Alias	DGCRK6; C22orf12; D16H22S788E; D16Wis2; DGCR 8; Dgcr8; DGCR8_HUMAN; DGCRK DiGeorge syndrome critical region 8; DiGeorge syndrome critical region gene 8; Gy1; Micropro subunit DGCR8; pasha.
Research Area	Developmental biology Chromatin and nuclear signals Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Human,Mouse,Rat,Chimpanzee,Rhesus monkey,Gorilla, Orangutan)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	86kDa
Cellular localization	The nucleus
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human DGCR8: 51-150/773
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or d applications.
PubMed	PubMed

Product Detail

This gene encodes a subunit of the microprocessor complex which mediates the biogenesis of mi
the primary microRNA transcript. The encoded protein is a double-stranded RNA binding protei
as the non-catalytic subunit of the microprocessor complex. This protein is required for binding
double-stranded RNA substrate and facilitates cleavage of the RNA by the ribonuclease III prote
Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010]

Function:
Component of the microprocessor complex that acts as a RNA- and heme-binding protein that is
initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that i
process primary miRNA transcripts (pri-miRNAs) to release precursor miRNA (pre-miRNA) in
Within the microprocessor complex, DGCR8 function as a molecular anchor necessary for the re
pri-miRNA at dsRNA-ssRNA junction and directs DROSHA to cleave 11 bp away form the junc
hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate ma
The heme-bound DGCR8 dimer binds pri-miRNAs as a cooperative trimer (of dimers) and is acti
pri-miRNA cleavage, whereas the heme-free DGCR8 monomer binds pri-miRNAs as a dimer ar
active. Both double-stranded and single-stranded regions of a pri-miRNA are required for its bin
in the silencing of embryonic stem cells self-renewal.

Subcellular Location:
Nucleus. Nucleus; nucleolus. Colocalizes with nucleolin and DROSHA in the nucleolus. Mostly
nucleolus as electron-dense granular patches around the fibrillar center (FC) and granular compon
detected in the nucleoplasm as small foci adjacent to splicing speckles near the chromatin structu
with DROSHA in GW bodies (GWBs), also known as P-bodies.

Tissue Specificity:
Ubiquitously expressed.

Similarity:
Contains 2 DRBM (double-stranded RNA-binding) domains.
Contains 1 WW domain.

SWISS:
Q8WYQ5

Gene ID:
54487

Database links:

Entrez Gene: 54487 Human

Omim: 609030 Human

SwissProt: Q8WYQ5 Human

Unigene: 643452 Human

Unigene: 713579 Human