

Rabbit DGCR8 Polyclonal Antibody | anti-DGCR8 antibody

Anti-DGCR8 Picoband antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124576	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

DGCR8; Polyclonal Antibody; Anti-DGCR8 Picoband antibody; Microprocessor complex subunit DGCR8; DiGeorge syndrome critical region 8; C22orf12; DGCRK6; LP4941; anti-DGCR8 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	740
Applicable Applications for anti-DGCR8 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Immunogen	E Coli-derived human DGCR8 recombinant protein (Position: K561-Q762).
Subcellular Localization	Nucleus.
Tissue Specificity	Ubiquitously expressed.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of DGCR8 using anti-DGCR8 antibody (AAA124576).DGCR8 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-DGCR8 Antibody (AAA124576) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of DGCR8 using anti-DGCR8 antibody (AAA124576).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human Hela whole cell lysates,Lane 2: human placenta tissue lysates,Lane 3: human COLO-320 whole cell lysates,Lane 4: human HepG2 whole cell lysates,Lane 5: human A549 whole cell lysates,Lane 6: human MCF-7 whole cell lysates,Lane 7: human 22RV1 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-DGCR8 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for DGCR8 at approximately 100KD. The expected band size for DGCR8 is at 86KD.

ADDITIONAL INFORMATION

Related Product Information for anti-DGCR8 antibody

Description: The DGCR8 microprocessor complex subunit (DiGeorge syndrome chromosomal [or critical] region 8) is a protein that in humans is encoded by the DGCR8 gene. This gene encodes a subunit of the microprocessor complex which mediates the biogenesis of microRNAs from the primary microRNA transcript. The encoded protein is a double-stranded RNA binding protein that functions as the non-catalytic subunit of the microprocessor complex. This protein is required for binding the double-stranded RNA substrate and facilitates cleavage of the RNA by the ribonuclease III protein, Drosha. Alternate splicing results in multiple transcript variants.

Protein 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 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 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).

NCBI AND UNIPROT INFORMATION

NCBI GI #	298358598
NCBI GeneID	54487
NCBI Accession #	NP_001177255.1
NCBI GenBank Nucleotide #	NM_001190326.1
UniProt Accession #	Q8WYQ5; Q6DCB2; Q6MZE9; Q6Y2L0; Q96G39; Q96GP8; Q9H6L8; Q9H6T7; Q9NRW2; B2R8G1
Molecular Weight	82,750 Da
NCBI Official Full Name	microprocessor complex subunit DGCR8 isoform 2
NCBI Official Synonym Full Names	DGCR8, microprocessor complex subunit
NCBI Official Symbol	DGCR8
NCBI Official Synonym Symbols	Gy1; pasha; DGCRK6; C22orf12

NCBI Protein Information	microprocessor complex subunit DGCR8
UniProt Protein Name	Microprocessor complex subunit DGCR8
UniProt Gene Name	DGCR8
UniProt Synonym Gene Names	C22orf12; DGCRK6

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/dgcr8-antibody-western-blot-immunohistochemistry-elisa/124576>