

Anti-DGCR8 (Ser377) Antibody

Our Anti-DGCR8 (Ser377) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is Catalog # AN1359

## **Product Information**

ApplicationWBPrimary AccessionQ8WYQ5HostRabbitClonalityPolyclonalIsotypeIgGCalculated MW86045

## **Additional Information**

**Gene ID** 54487

Other Names DGCRK6 antibody, C22orf12 antibody, D16H22S788E antibody, D16Wis2

antibody, DGCR 8 antibody, Dgcr8 antibody, DGCR8 microprocessor complex subunit antibody, DGCR8\_HUMAN antibody, DGCRK 6 antibody, DiGeorge syndrome critical region 8 antibody, DiGeorge syndrome critical region gene 8 antibody, Gy1 antibody, Microprocessor complex subunit DGCR8 antibody,

pasha antibody

**Target/Specificity** The Drosha-DGCR8 microprocessor complex is required for microRNA

(miRNA) biogenesis. DGCR8 (DiGeorge Syndrome Critical Region 8) recognizes the RNA substrate, whereas Drosha functions as the endonuclease. DGCR8, which contains two double-stranded RNA (dsRNA)-binding domains, interacts with the pri-miRNA and functions as the molecular anchor that measures the distance from the ds-RNA-ssRNA junction and directs Drosha cleavage 11bp away (Han, J., et al, 2006). The efficiency of Drosha cleavage increases in the presence of heme and promotes the formation of highly ordered DGCR8

structures upon binding to RNA (Faller, M., et al, 2010).

**Dilution** WB~~1:1000

**Format** Antigen Affinity Purified from Pooled Serum

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Anti-DGCR8 (Ser377) Antibody is for research use only and not for use in

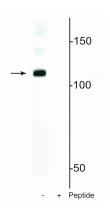
diagnostic or therapeutic procedures.

Shipping Blue Ice

## **Background**

The Drosha-DGCR8 microprocessor complex is required for microRNA (miRNA) biogenesis. DGCR8 (DiGeorge Syndrome Critical Region 8) recognizes the RNA substrate, whereas Drosha functions as the endonuclease. DGCR8, which contains two double-stranded RNA (dsRNA)-binding domains, interacts with the pri-miRNA and functions as the molecular anchor that measures the distance from the ds-RNA-ssRNA junction and directs Drosha cleavage 11bp away (Han, J., et al, 2006). The efficiency of Drosha cleavage increases in the presence of heme and promotes the formation of highly ordered DGCR8 structures upon binding to RNA (Faller, M., et al, 2010).

## **Images**



Western blot of mouse nuclei lysate showing specific immunolabeling of the ~120 kDa DGCR8 protein phosphorylated at in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is blocked by preadsorption of the phosphopeptide used as the antigen, but not by the corresponding non-phosphopeptide (not shown).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.