

**Phospho-Ser377 DGCR8 Antibody**  
Affinity purified rabbit polyclonal antibody  
Catalog # AN1237

**Specification**

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**Phospho-Ser377 DGCR8 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O8WY05</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	120 KDa

**Phospho-Ser377 DGCR8 Antibody - Additional Information**

Gene ID	1644
Gene Name	DGCR8

**Other Names**

Microprocessor complex subunit DGCR8, DiGeorge syndrome critical region 8, DGCR8, C22orf12, DGCRK6

**Target/Specificity**

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser377 conjugated to KLH.

**Dilution**

WB~~ 1:1000

**Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.

**Antibody Specificity**

Specific for the ~120k DGCR8 protein phosphorylated at Ser377. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.

**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**

Phospho-Ser377 DGCR8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

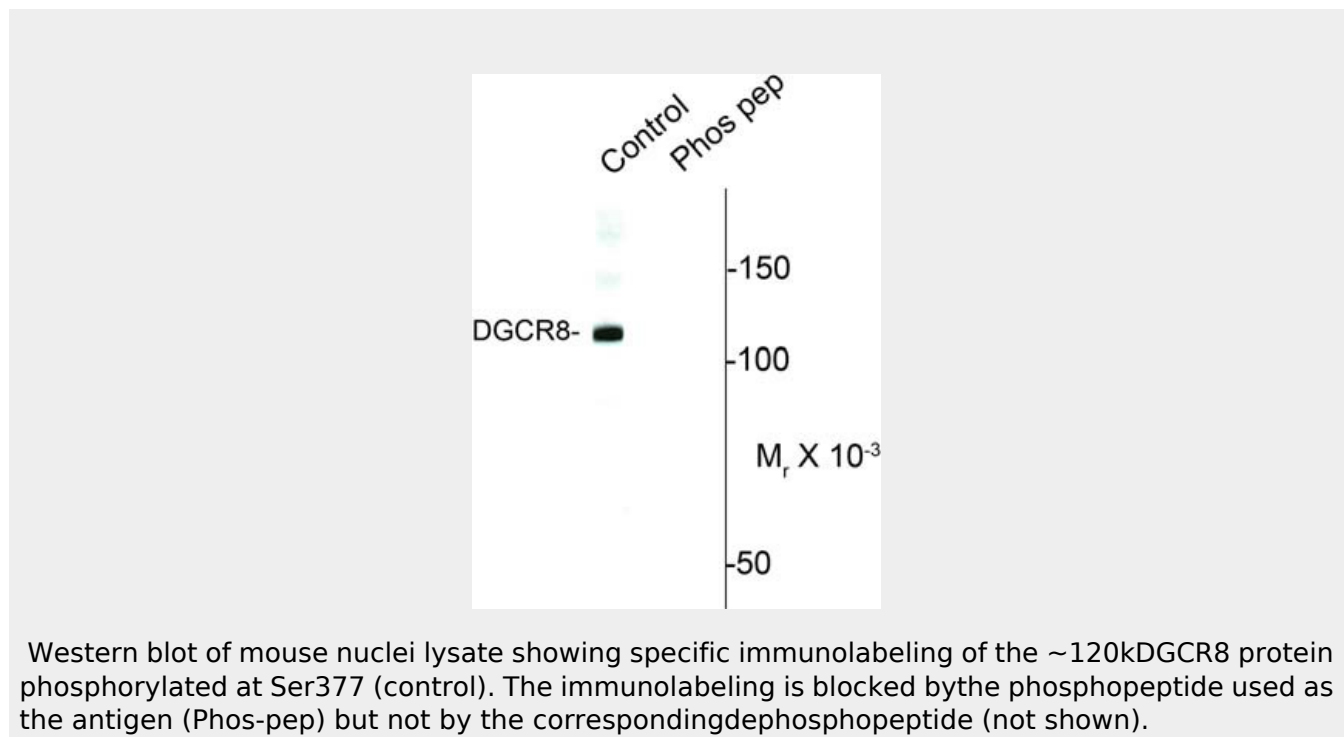
Blue Ice

**Phospho-Ser377 DGCR8 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Phospho-Ser377 DGCR8 Antibody - Images



Western blot of mouse nuclei lysate showing specific immunolabeling of the ~120kDGCR8 protein phosphorylated at Ser377 (control). The immunolabeling is blocked by the phosphopeptide used as the antigen (Phos-pep) but not by the corresponding dephosphopeptide (not shown).

### Phospho-Ser377 DGCR8 Antibody - 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 et al, 2010).

### Phospho-Ser377 DGCR8 Antibody - References

- Han J, Lee Y, Yeom KH, Nam JW, Heo I, Rhee JK, Sohn SY, Cho Y, Zhang BT, Kim VN (2006). Molecular basis for the recognition of primary microRNAs by the Drosha-DGCR8 complex. *Cell* Jun 2; 125(5): 887-901.
- Faller M, Toso D, Matsunaga M, Atanasov I, Senturia R, Chen Y, Zhou Zh, Guo F (2010). DGCR8 recognizes primary transcripts of microRNAs through highly cooperative binding and formation of higher-order structures. *RNA* 2010 Aug;16(8):1570-83.