



## DCR-2 blocking peptide (DAG-P0419)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

#### Antigen Description

RNA interference is an evolutionarily conserved gene silencing pathway in which the endonuclease, Dicer cleaves double stranded RNA into small interfering RNAs. Dicer is a multidomain protein related to the RNase III protein family. Dicer is required by the RNA interference and small temporal RNA (stRNA) pathways to produce the active small interfering RNA (siRNA) component that represses gene expression. Dicer related RNA interference machinery is also involved in the formation of the heterochromatin structure in organisms such as yeast and higher vertebrate cells. In mammalian cells, both microRNAs (miRNAs) and small interfering RNAs (siRNAs) are thought to be loaded into the same RNA induced silencing complex (RISC), where they guide mRNA degradation or translation silencing depending on the complementarity of the target. Two transcript variants encoding the same protein have been identified. The *Saccharomyces cerevisiae* cell cycle regulator genes DCR2 and DCR1 appear to be involved in the initiation of DNA replication. It has been predicted that DCR2 might encode a protein with phosphoesterase activity.

Conjugate	Unconjugated
Applications	BL
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

Gene Name	<a href="#">Dcr-2 Dicer-2 [ <i>Drosophila melanogaster</i> (fruit fly) ]</a>
Official Symbol	DCR-2

<b>Synonyms</b>	DCR-2; Dicer-2; cg6493; CG6493; Dcr; dcr-2; DCR-2; dcr2; Dcr2; DCR2; dic2; dicer; Dicer; DICER; dicer2; Dicer2; Dmel\CG6493; CG6493-PA; Dcr-2-PA; Dicer2; dicer; dicer 2;
<b>Entrez Gene ID</b>	<a href="#">36993</a>
<b>mRNA Refseq</b>	<a href="#">NM_079054.4</a>
<b>Protein Refseq</b>	<a href="#">NP_523778.2</a>
<b>UniProt ID</b>	A1ZAW0
<b>Chromosome Location</b>	54C10-54C10
<b>Pathway</b>	Gene Expression, organism-specific biosystem; MicroRNA (miRNA) Biogenesis, organism-specific biosystem; Regulatory RNA pathways, organism-specific biosystem; Small Interfering RNA (siRNA) Biogenesis, organism-specific biosystem;
<b>Function</b>	ATP binding; ATP-dependent helicase activity; ATPase activity; double-stranded RNA binding; double-stranded RNA binding; helicase activity; helicase activity; ribonuclease III activity; siRNA binding;