



# Mouse MDC1 blocking peptide (DAG-P0767)

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

## PRODUCT INFORMATION

<b>Antigen Description</b>	The protein encoded by this gene contains an N-terminal forkhead domain, two BRCA1 C-terminal (BRCT) motifs and a central domain with 7 divergent copies of an approximately 41-amino acid sequence. The encoded protein is required to activate the intra-S phase and G2/M phase cell cycle checkpoints in response to DNA damage. This nuclear protein interacts with phosphorylated histone H2AX near sites of DNA double-strand breaks through its BRCT motifs, and facilitates recruitment of the ATM kinase and meiotic recombination 11 protein complex to DNA damage foci. Mice with mutations in this gene exhibit growth retardation, male infertility, immune defects, chromosome instability, DNA repair defects, and radiation sensitivity. [provided by RefSeq, Jul 2008]
<b>Specificity</b>	Highly expressed in testis.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	BL
<b>Sequence Similarities</b>	Contains 2 BRCT domains.Contains 1 FHA domain.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	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

<b>Gene Name</b>	<a href="#">Mdc1 mediator of DNA damage checkpoint 1 [ Mus musculus (house mouse) ]</a>
<b>Official Symbol</b>	MDC1

<b>Synonyms</b>	MDC1; mediator of DNA damage checkpoint 1; Nfbd1; AA413496; mKIAA0170; 6820401C03; mediator of DNA damage checkpoint protein 1; mediation of DNA damage checkpoint 1;
<b>Entrez Gene ID</b>	<a href="#">240087</a>
<b>mRNA Refseq</b>	<a href="#">NM_001010833.2</a>
<b>Protein Refseq</b>	<a href="#">NP_001010833.2</a>
<b>UniProt ID</b>	E9QK89
<b>Chromosome Location</b>	17 B1; 17
<b>Pathway</b>	ATM mediated phosphorylation of repair proteins, organism-specific biosystem; ATM mediated response to DNA double-strand break, organism-specific biosystem; DNA Repair, organism-specific biosystem; Double-Strand Break Repair, organism-specific biosystem; Homologous Recombination Repair, organism-specific biosystem; Homologous recombination repair of replication-independent double-strand breaks, organism-specific biosystem; Recruitment of repair and signaling proteins to double-strand breaks, org
<b>Function</b>	FHA domain binding; protein C-terminus binding;