



Mouse MDC1 blocking peptide (DAG-P0767)

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

PRODUCT INFORMATION

Antigen Description	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]
Specificity	Highly expressed in testis.
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Contains 2 BRCT domains. Contains 1 FHA domain.
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	Mdc1 mediator of DNA damage checkpoint 1 [Mus musculus (house mouse)]
Official Symbol	MDC1

Synonyms	MDC1; mediator of DNA damage checkpoint 1; Nfbd1; AA413496; mKIAA0170; 6820401C03; mediator of DNA damage checkpoint protein 1; mediation of DNA damage checkpoint 1;
Entrez Gene ID	240087
mRNA Refseq	NM_001010833.2
Protein Refseq	NP_001010833.2
UniProt ID	E9QK89
Chromosome Location	17 B1; 17
Pathway	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
Function	FHA domain binding; protein C-terminus binding;
