

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MDC1 in Western blots.
Source	Monoclonal Rat IgG _{2A} Clone # 398636
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MDC1 Met1-Glu335 Accession # Q14676
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Mediator of DNA damage checkpoint protein 1 (MDC1), also known as nuclear factor with BRCT domains protein 1 (NFB1), is a 250 kDa nuclear protein that is required to activate the intra-S phase and G2/M phase cell cycle checkpoints in response to DNA damage. Human MDC1 is 2089 amino acids (aa) in length and contains a forkhead-associated motif at its N terminus, two BRCT motifs at its C terminus, and 13 internal repetitions of a 41 aa sequence enriched with serine, threonine, and proline residues. Splicing variants produce five isoforms of MDC1. Human MDC1 shares 49% aa sequence identity with mouse MDC1. MDC1 is highly expressed in testis.

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