

Product datasheet for R1478P

MDC1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	This affinity purified antibody has been tested for use in ELISA against the immunizing peptide. Reactivity in other immunoassays is unknown. This product has been assayed by ELISA against 0.1 ug of the immunizing peptide. A 1:3,000 to 1:12,000 dilution of the antibody is recommended for this assay.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to aa 679-694 of Human MDC1 (mediator of DNA damage checkpoint protein 1). MDC1 is hyper-phosphorylated in an ATM-dependent manner.
Specificity:	This is an affinity purified antibody produced by Immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 with 0.01% (w/v) Sodium Azide as preservative. State: Aff - Purified State: Liquid (sterile filtered) purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity chromatography.
Conjugation:	Unconjugated
Storage:	Store vial at -20°C. For extended storage aliquot contents and freeze at -20°C or below. Dilute only prior to immediate use. Avoid cycles of freezing and thawing.
Stability:	Shelf life: One year from despatch
Gene Name:	mediator of DNA damage checkpoint 1
Database Link:	Entrez Gene 9656 Human Q14676



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Background:

MDC1 (Mediator of DNA damage checkpoint protein 1) plays a role in checkpoint mediated cell cycle arrest in response to DNA damage, both within S phase and G2/M. It is thought to act as a scaffold protein during the recruitment of DNA repair and signal transduction proteins to discrete foci of DNA damage that are marked by phosphorylation of histone H2A.X on S139. MDC1 is also involved in downstream events subsequent to the recruitment of these proteins. MDC1 has tandem repeat BRCT domains that are required for localisation to chromatin that flanks sites marked by S139 phosphorylated histone H2A.X. MDC1 is phosphorylated following exposure to ionising radiation (IR), ultraviolet radiation (UV), and hydroxyurea (HU). MDC1 is also phosphorylated during G2/M and during activation of the mitotic spindle checkpoint.

Synonyms:

MDC1, KIAA0170, NFB1