

R1478CP**MDC1 Control Peptide****Alternate names:**

KIAA0170, MDC1, Mediator of DNA damage checkpoint protein 1, NFB1

Quantity:

50 µg

Concentration:

1.0 mg/ml (by weight)

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.

Uniprot ID:[Q14676](#)**NCBI:**[NP_055456.2](#)**GeneID:**[9656](#)**Format:****State:** Liquid (sterile filtered)**Purification:** Greater than 95% specific peptide**Buffer System:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide**Applications:**

Control peptide should be used at 1.0 µg per 1.0 µl of antiserum in per assay. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This product is a MDC1 Control Peptide.

Storage:

Store the antibody at -20°C.

Avoid repeated freezing and thawing.

Shelf life: 6 month from despatch.