

Product datasheet

Human MDC1 (phospho S964) peptide ab36491

製品の概要

製品名 Human MDC1 (phospho S964) peptide

製品の詳細

由来 Synthetic

アミノ酸配列

生物種 Human

修飾 phospho S964

特性

Our [Abpromise guarantee](#) covers the use of **ab36491** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション Blocking - Blocking peptide for Anti-MDC1 (phospho S964) antibody ([ab36017](#))

精製度 70 - 90% by HPLC.

製品の状態 Liquid

備考

- First try to dissolve a small amount of peptide in either water or buffer. The more charged residues on a peptide, the more soluble it is in aqueous solutions.
- If the peptide doesn't dissolve try an organic solvent e.g. DMSO, then dilute using water or buffer.
- Consider that any solvent used must be compatible with your assay. If a peptide does not dissolve and you need to recover it, lyophilise to remove the solvent.
- Gentle warming and sonication can effectively aid peptide solubilisation. If the solution is cloudy or has gelled the peptide may be in suspension rather than solubilised.
- Peptides containing cysteine are easily oxidised, so should be prepared in solution just prior to use.

前処理および保存

保存方法および安定性 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

関連情報

機能	Required for checkpoint mediated cell cycle arrest in response to DNA damage within both the S phase and G2/M phases of the cell cycle. May serve as a scaffold for the recruitment of DNA repair and signal transduction proteins to discrete foci of DNA damage marked by 'Ser-139' phosphorylation of histone H2AFX. Also required for downstream events subsequent to the recruitment of these proteins. These include phosphorylation and activation of the ATM, CHEK1/CHK1 and CHEK2/CHK2/CDS1 kinases, and stabilization of TP53 and apoptosis. ATM and CHEK2 may also be activated independently by a parallel pathway mediated by TP53BP1.
組織特異性	Highly expressed in testis.
配列類似性	Contains 2 BRCT domains. Contains 1 FHA domain.
ドメイン	Tandemly repeated BRCT domains are characteristic of proteins involved in DNA damage signaling. In MDC1, these repeats are required for localization to chromatin which flanks sites of DNA damage marked by 'Ser-139' phosphorylation of H2AFX.
翻訳後修飾	Phosphorylated upon exposure to ionizing radiation (IR), ultraviolet radiation (UV), and hydroxyurea (HU). Phosphorylation in response to IR requires ATM, NBN, and possibly CHEK2. Also phosphorylated during the G2/M phase of the cell cycle and during activation of the mitotic spindle checkpoint.
細胞内局在	Nucleus. Associated with chromatin. Relocalizes to discrete nuclear foci following DNA damage, this requires 'Ser-139' phosphorylation of H2AFX. Colocalizes with APTX at sites of DNA double-strand breaks.

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