# abcam

## Product datasheet

## Anti-MDC1 antibody [MDC1-50] ab50003

### ★★★★ <u>3 Abreviews</u> <u>15 References</u>

#### 製品の概要

製品名 Anti-MDC1 antibody [MDC1-50]

製品の詳細 Mouse monoclonal [MDC1-50] to MDC1

由来種 Mouse

アプリケーション 適用あり: ICC, IP, ICC/IF, WB

種交差性 交差種: Human, Monkey

免疫原 Recombinant fragment, corresponding to amino acids 2-200 of Human MDC1

ポジティブ・コントロール WB: total cell extract of G361 cells.

特記事項 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.097% Sodium azide

Constituent: 0.0268% PBS

特記事項(精製) This antibody is a purified Mouse Immunoglobulin.

**ポリ/モノ** モノクローナル

**クローン名** MDC1-50

 ミエローマ
 NS1

 アイソタイプ
 lqG2a

マポリケーシュン

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab50003の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF	<b>★★★★</b> <u>(3)</u>	Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

#### ターゲット情報

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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish

- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

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