# abcam

# Product datasheet

# Anti-Rad50 antibody [EPR3466(2)] ab124682

יולצעבע RabMAb

★★★★★ 5 Abreviews 7 References 画像数 5

#### 製品の概要

製品名 Anti-Rad50 antibody [EPR3466(2)]

製品の詳細 Rabbit monoclonal [EPR3466(2)] to Rad50

由来種 Rabbit

アプリケーション **適用あり:** WB

適用なし: Flow Cyt (Intra) or ICC/IF

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール K562, MOLT4, Jurkat and MCF7 cell lysates.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### 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.

Avoid freeze / thaw cycle. Stable for 12 months at -20°C.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR3466(2)

アイソタイプ ΙgG

**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ab124682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
WB	**** <u>(2)</u>	1/1000 - 1/10000. Detects a band of approximately 150 kDa (predicted molecular weight: 154 kDa).

追加情報

Is unsuitable for Flow Cyt (Intra) or ICC/IF.

## ターゲット情報

機能

Component of the MRN complex, which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11A. RAD50 may be required to bind DNA ends and hold them in close proximity. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11A to prevent nucleolytic degradation past a given point. The complex may also be required for DNA damage signaling via activation of the ATM kinase. In telomeres the MRN complex may modulate t-loop formation.

組織特異性

Expressed at very low level in most tissues, except in testis where it is expressed at higher level.

Expressed in fibroblasts.

関連疾患

Defects in RAD50 are the cause of Nijmegen breakage syndrome-like disorder (NBSLD) [MIM:613078]; also called NBS-like disorder or RAD50 deficiency. NBSLD is a disorder similar to Nijmegen breakage syndrome and characterized by chromosomal instability, radiation sensitivity, microcephaly, growth retardation, short stature and bird-like face. Immunodeficiency is about

absent.

**配列類似性** Belongs to the SMC family. RAD50 subfamily.

Contains 1 zinc-hook domain.

ドメイン

The zinc-hook, which separates the large intramolecular coiled coil regions, contains 2 Cys residues that coordinate one molecule of zinc with the help of the 2 Cys residues of the zinc-hook of another RAD50 molecule, thereby forming a V-shaped homodimer. The two heads of the homodimer, which constitute the ATP-binding domain, interact with the MRE11A homodimer.

翻訳後修飾

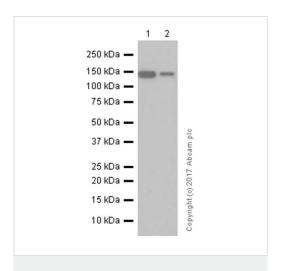
Phosphorylated upon DNA damage, probably by ATM or ATR.

細胞内局在

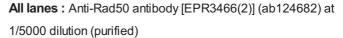
Nucleus. Chromosome > telomere. Localizes to discrete nuclear foci after treatment with

genotoxic agents.

画像



Western blot - Anti-Rad50 antibody [EPR3466(2)] (ab124682)



Lane 1: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates

Lane 2: MOLT-4 (Human lymphoblastic leukemia T lymphoblast) whole cell lysates

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 154 kDa

2 250 kDa -250 kDa 🕳 150 kDa -150 kDa -100 kDa -

100 kDa 🕳 75 kDa 🕳 75 kDa 🕳 50 kDa 🕳 50 kDa -Copyright (c) 2017 Abcam plo 37 kDa 🕳 37 kDa -25 kDa 🕳 25 kDa 🕳 20 kDa 🕳 20 kDa -15 kDa 🕳 15 kDa 🕳 10 kDa 🕳 10 kDa -

Western blot - Anti-Rad50 antibody [EPR3466(2)] (ab124682)

Blocking and diluting buffer: 5% NFDM/TBST

All lanes: Anti-Rad50 antibody [EPR3466(2)] (ab124682) at 1/1000 dilution (purified)

Lane 1: Human fetal brain lysates

Lane 2: Mouse thymus lysates

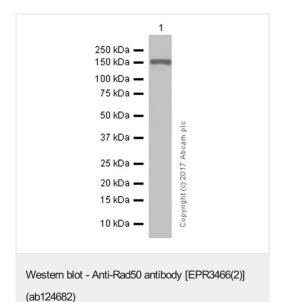
Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 154 kDa

Blocking and diluting buffer: 5% NFDM/TBST



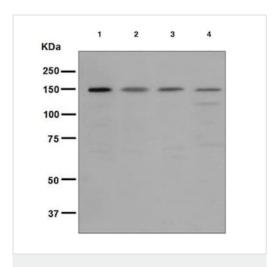
Anti-Rad50 antibody [EPR3466(2)] (ab124682) at 1/1000 dilution (purified) + Rat testis lysates at 20  $\mu g$ 

#### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 154 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Rad50 antibody [EPR3466(2)] (ab124682)

**All lanes :** Anti-Rad50 antibody [EPR3466(2)] (ab124682) at 1/1000 dilution (unpurified)

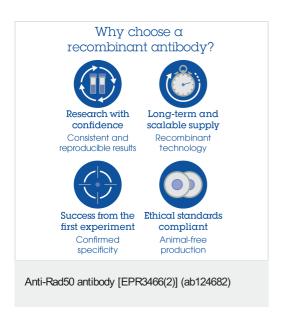
Lane 1 : K562 cell lysate
Lane 2 : MOLT4 cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : MCF7 cell lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

All lanes: Goat anti-Rabbit HRP at 1/2000 dilution

**Predicted band size:** 154 kDa **Observed band size:** 150 kDa



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