# abcam

## Product datasheet

# Anti-Melphalan antibody [Amp4/42] ab97554

#### **5 References**

Overview

Product name Anti-Melphalan antibody [Amp4/42]

**Description** Mouse monoclonal [Amp4/42] to Melphalan

Host species Mouse

**Specificity** This antibody recognises the ring-opened structure that forms when DNA is alkylated by the anti-

cancer drug melphalan and is then exposed to alkali. The alkali causes guanine bases alkylated at the N7 position to undergo a so-called ring-opening reaction and this antibody appears to recognise this structure, although recognition may be influenced by the neighbouring DNA sequence. The products of the ring-opening reaction are more resistant to depurination reactions

than the original guanine adducts. This antibody was developed to improve detection of

melphalan-DNA adducts through its ability to recognise the stabilised adduct. The Amp4/42 clone did not bind to alkali-treated control DNA or to DNA that had been alkylated with melphalan but not exposed to alkali. This antibody can be used for quantification of melphalan adducts in

purified DNA by ELISA and for immunofluorescent detection of melphalan-DNA adducts in single

cells.

Tested applications Suitable for: ELISA

Species reactivity Reacts with: Species independent

Immunogen Chemical/ Small Molecule corresponding to Melphalan. DNA/ melphalan alkylated DNA.

Positive control DNA/ melphalan alkylated DNA.

**General notes**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

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

Storage buffer Preservative: 0.02% Sodium azide

Constituent: 99.98% PBS

1

Purity Protein A/G purified

**Clonality** Monoclonal

Clone number Amp4/42

Myeloma Y3/Ag1.2.3

**Isotype** IgG2b

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab97554 in the following tested applications.

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

Application	Abreviews	Notes
ELISA		Use at an assay dependent dilution.

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

## Our Abpromise to you: Quality guaranteed and expert technical support

- 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.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors