abcam

Product datasheet

Anti-1-methylguanosine (m1G) antibody [EPR19833-150] ab208199



RabMAb

5 Images

Overview

Product name Anti-1-methylguanosine (m1G) antibody [EPR19833-150]

Description Rabbit monoclonal [EPR19833-150] to 1-methylguanosine (m1G)

Host species Rabbit

Tested applications Suitable for: FRET, Dot blot, ELISA, IP

Species reactivity Reacts with: Species independent

Immunogen Chemical/ Small Molecule within 1-methylguanosine (m1G). The exact sequence is proprietary.

General notesThis 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**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR19833-150

Isotype IgG

1

The Abpromise guarantee

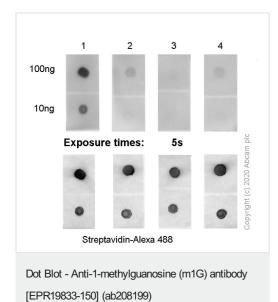
Our **Abpromise guarantee** covers the use of ab208199 in the following tested applications.

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

| Application | Abreviews | Notes |
|-------------|-----------|--|
| FRET | | Use a concentration of 0.001 - 4 µg/ml. |
| Dot blot | | 1/500. |
| ELISA | | Use a concentration of 0.005 - 4 µg/ml. |
| IP | | Use at an assay dependent concentration. |

Target

Images



Dot blot analysis of 1-methylguanosine (m1G) using ab208199 at 1/500 dilution, followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20,000 dilution (Upper) or a Streptavidin-Alexa[®]488 conjugate (Lower).

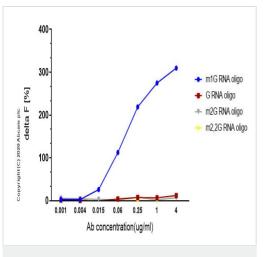
Lane 1: Biotin-m1G RNA oligo

Lane 2: Biotin-G RNA oligo

Lane 3: Biotin-m2G RNA oligo

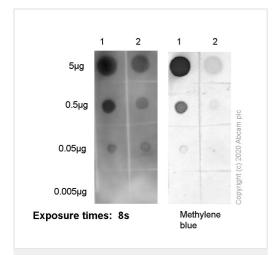
Lane 4: Biotin-m22G RNA oligo

Exposure time 5 seconds



FRET - Anti-1-methylguanosine (m1G) antibody [EPR19833-150] (ab208199)

A FRET-based assay was performed using 25 nm of each biotinylated oligo using ab208199 at a concentration range of 0.001-4.000 $\mu g/ml$.



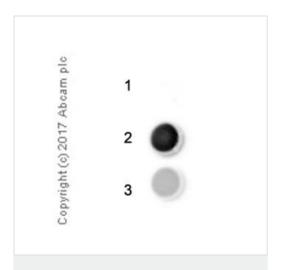
Dot Blot - Anti-1-methylguanosine (m1G) antibody [EPR19833-150] (ab208199)

Dot blot analysis of 1-methylguanosine (m1G) using ab208199 at 1/500 dilution, followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20,000 dilution (Left) or Methylene Blue (Right).

Lane 1: HeLa total RNA

Lane 2: Yeast tRNA

Exposure time: 8 seconds



Immunoprecipitation - Anti-1-methylguanosine (m1G) antibody [EPR19833-150] (ab208199)

The IP was performed in a U-bottom non-adsorbing propylene 96well plate.

ab208199 (0.2 μ g) was coated into Dynabeads [®] sheep-anti-rabbit lgG (50 μ l) for 1h at RT.

Unmodified/modified oligonucleotides (5 μ M) were added to samples containing the antibody/bead complexes and incubated with agitation for 1 hour at RT.

After washing, Peroxidase-conjugated Streptavidin was incubated at 1/1000 dilution with agitation for 1 hour at RT.

ECL substrate was then added and the results read in a non-transparent 96-well plate with a digital detector and analyzed using ImageJ.

Lane 1: Buffer only.

Lane 2: Modified oligonucleotide (5 μM), 5' Biotin-mN.mN.mN.mN.mN.fm1G]*.mN.mN.mN.mN.mN.mN 3'

Lane 3: Unmodified oligonucleotide (5 μ M), 5' Biotin-mN.mN.mN.mN.mN.mN.mN.mN.mN 3'

N - equimolar mixture of (A/U/G/C)

m - 2'O methyl protection

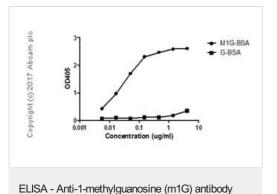
* - phosphorothioate protection

Blocking buffer and concentration: 5% NFDM/TBST

Dilution buffer and concentration: TBST/0.1% Triton X-100/1 mM

BSA-conjugated m1G (modified) and G (unmodified) nucleosides

EDTA



were coated onto wells of a 96 well plate. ELISA was performed on 1.0 μ g/ml of antigen using ab208199 at a concentration range of 0.005-4.000 μ g/ml, followed by Goat Anti-Rabbit μ gG, (H+L), alkaline phosphatase conjugated secondary antibody at 1/2500 dilution.

[EPR19833-150] (ab208199)

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