

Anti-N2,N2-dimethylguanosine (m2,2G) antibody [EPR-19838-40] - BSA and Azide free ab251526

Recombinant RabMAb

5 Images

Overview

Product name	Anti-N2,N2-dimethylguanosine (m2,2G) antibody [EPR-19838-40] - BSA and Azide free
Description	Rabbit monoclonal [EPR-19838-40] to N2,N2-dimethylguanosine (m2,2G) - BSA and Azide free
Host species	Rabbit
Specificity	Has been developed to discriminate between the modified base N2,N2-dimethylguanosine (m2,2G) and the unmodified counterpart Guanosine (G).
Tested applications	Suitable for: ELISA, IP, Dot blot
Species reactivity	Reacts with: Species independent
Immunogen	Chemical/ Small Molecule. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>ab251526 is the carrier-free version of ab211488.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR-19838-40
Isotype	IgG

Applications

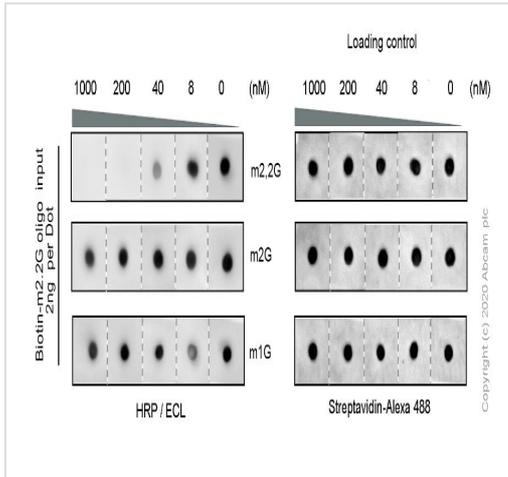
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251526 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
Dot blot		Use at an assay dependent concentration.

Target

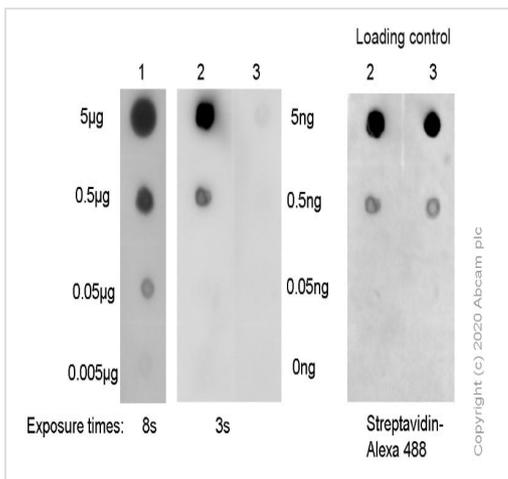
Relevance N²,N²-dimethylguanosine (m²,2G) is an RNA modification found in tRNA in eukarya and archaea and rRNA in bacteria and eukaryotes.

Images



Dot Blot - Anti-N2,N2-dimethylguanosine (m2,2G) antibody [EPR-19838-40] - BSA and Azide free (ab251526)

This data was developed using [ab211488](#), the same antibody clone in a different buffer formulation. Primary antibody dilution: 1/500 Secondary antibody: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated Secondary antibody dilution: 1/100,000 Blocking and dilution buffer: AdvanBlock™ Chemi Blocking buffer Input: Biotin-m2.2G oligo 2 ng per Dot Competitive nucleosides: m2.2G, m2G, m1G Exposure times: 37 seconds



Dot Blot - Anti-N2,N2-dimethylguanosine (m2,2G) antibody [EPR-19838-40] - BSA and Azide free (ab251526)

This data was developed using [ab211488](#), the same antibody clone in a different buffer formulation. Lane 1: Yeast tRNA Lane 2: Biotin-m2.2G RNA oligo Lane 3: Biotin-G RNA oligo Primary antibody dilution: 1/500 Secondary antibody: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated Secondary antibody dilution: 1/20,000 Blocking and dilution buffer: AdvanBlock™ Chemi Blocking buffer

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Immunoprecipitation - Anti-N2,N2-dimethylguanosine (m2,2G) antibody [EPR-19838-40] - BSA and Azide free (ab251526)

This data was developed using **ab211488**, the same antibody clone in a different buffer formulation.

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

ab211488 (0.2 µg) was coated into Dynabeads® sheep-anti-rabbit IgG (50 µl) for 1h at RT.

Unmodified/modified oligonucleotides (5 µM) 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.[m2,2G]*.mN.mN.mN.mN.mN 3'

Lane 3: Unmodified oligonucleotide (5 µM), 5' Biotin-mN.mN.mN.mN.mN.[G]*.mN.mN.mN.mN.mN 3'

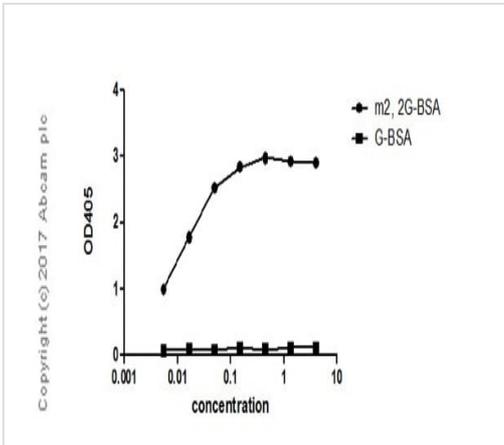
N - equimolar mixture of (A/U/G/C)

m - 2'O methyl protection

* - phosphorothioate protection

Blocking buffer: 5% NFDm/TBST

Dilution buffer: TBST/0.1% Triton X-100/1 mM EDTA.



This data was developed using **ab211488**, the same antibody clone in a different buffer formulation. BSA-conjugated m2,2G (modified) and G (unmodified) nucleosides were coated onto wells of a 96 well plate. ELISA was performed on 1.0 µg/ml of antigen using **ab211488** at a concentration range of 0.005-4.000 µg/ml, followed by Goat Anti-Rabbit IgG, (H+L), alkaline phosphatase conjugated secondary antibody at 1/2500 dilution.

ELISA - Anti-N2,N2-dimethylguanosine (m2,2G) antibody [EPR-19838-40] - BSA and Azide free (ab251526)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

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