ARG57237
anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Monoclonal antibody [RM236] recognizes 5-hydroxymethylcytosine / 5-hmC
Tested Reactivity	Other
Tested Application	Dot, ELISA, ICC/IF, IHC-P, MeDIP
Specificity	This antibody reacts to 5-hydroxymethylcytosine in both single-stranded and double-stranded DNA. No cross reactivity with non-methylated cytosine and methylcytosine in DNA.
Host	Rabbit
Clonality	Monoclonal
Clone	RM236
Isotype	IgG
Target Name	5-hydroxymethylcytosine / 5-hmC
Species	Others
Immunogen	BSA-conjugated 5-hydroxymethylcytosine.
Conjugation	Un-conjugated

Application Instructions

Application table

Application	Dilution
Dot	0.2 - 1 µg/ml
ELISA	0.1 - 1 µg/ml
ICC/IF	0.5 - 2 µg/ml
IHC-P	0.1 - 1 µg/ml
MeDIP	0.2 - 2 µg/ml

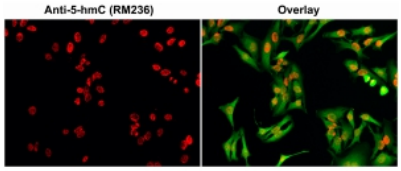
Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.09% Sodium azide, 50% Glycerol and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol and 1% BSA
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

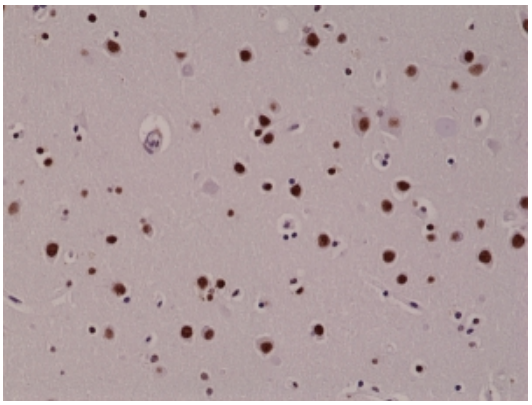
Images



ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] ICC/IF image

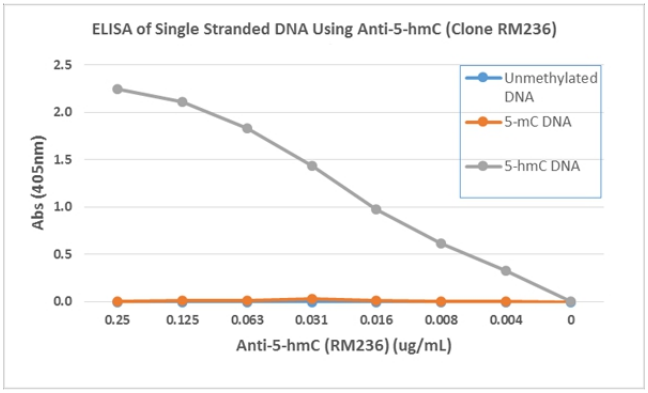
Immunofluorescence: HeLa cells stained with ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] at 0.5 µg/ml (red). Actin filaments was labeled with fluorescein phalloidin (green).

Cells were fixed with 4% parafor-maldehyde and permeabilized with methanol (-20°C) before treatment with 2 N HCl for 30 min at 37°C to denature DNA.



ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] IHC-P image

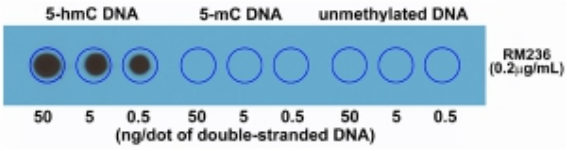
Immunohistochemistry: Formalin-fixed and paraffin-embedded Human brain tissue sections stained with ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236].



ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] ELISA image

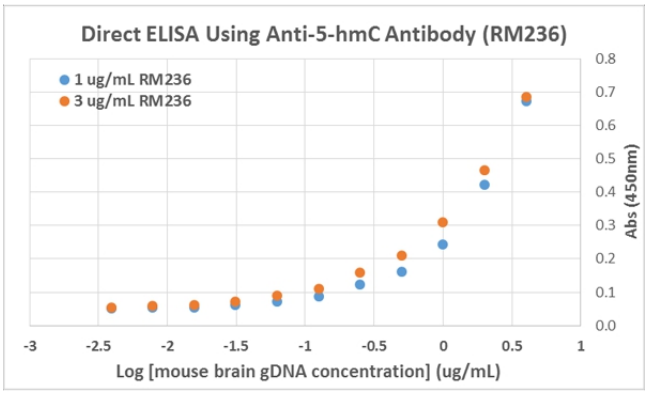
ELISA: Titration curve of ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236]. Antigen: The plate was coated with streptavidin and then biotinylated single stranded unmethylated DNA, 5-Methylcytosine (5-mC) DNA, and 5-Hydroxymethylcytosine (5-hmC) DNA.

Secondary antibody: An alkaline phosphatase conjugated anti-rabbit IgG.



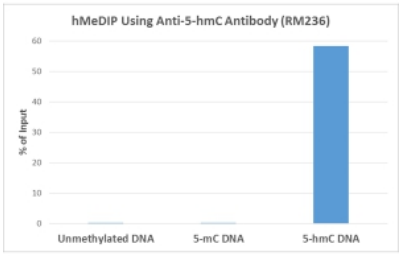
ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] Dot blot image

Dot blot: Double stranded DNA using ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236]. The membrane was pre-spotted with 50, 5, and 0.5 ng/dot of double stranded 5-Hydroxymethylcytosine (5-hmC) DNA, 5-Methylcytosine (5-mC) DNA, and unmethylated DNA. The pre-spotted membrane was then blotted with ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236].



ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] ELISA image

Direct ELISA: The plate was directly coated with different concentrations of genomic DNA isolated from Mouse brain tissue. 1 µg/ml or 3 µg/ml of ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] was used as the primary antibody, and a HRP-conjugated anti-rabbit IgG as the secondary antibody.



ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] hMeDIP image

hMeDIP: ARG57237 anti-5-hydroxymethylcytosine / 5-hmC antibody [RM236] at a 10:1 DNA:Ab ratio. 1 ng of unmethylated, 5-Methylcytosine (5-mC) or 5-Hydroxymethylcytosine (5-hmC) DNA standard (897 bp) was spiked in 1 µg of genomic DNA isolated from HeLa cells as the control. Realtime PCR was then performed to determine the capture of DNA standard as in % of input.