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MeCP2 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2545D

Product Information

Application	WB, IHC-P-Leica, E
Primary Accession	P51608
Other Accession	Q9Z2D6, P51608, Q95LG8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	400-428

Additional Information

Other Names	Methyl-CpG-binding protein 2, MeCp-2 protein, MeCp2, MECP2
Target/Specificity	This MeCP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 400-428 amino acids from human MeCP2.
Dilution	WB~~1:2000 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MeCP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

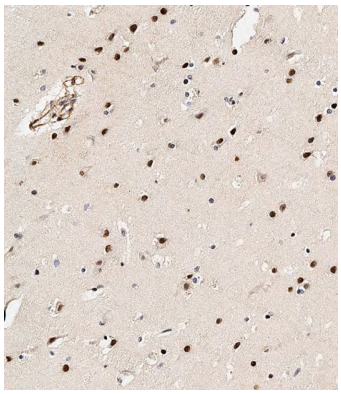
DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. In contrast to other MBD family members, MECP2 is X-linked and subject to X inactivation. MECP2 is dispensible in stem cells, but is essential for

embryonic development. MECP2 gene mutations are the cause of some cases of Rett syndrome, a progressive neurologic developmental disorder and one of the most common causes of mental retardation in females.

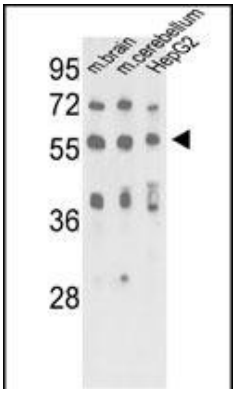
References

dos Santos, J.M., et al., Neurosci. Lett. 379(1):13-16 (2005).
Ylisaukko-Oja, T., et al., Am J Med Genet A 132(2):121-124 (2005).
Schanen, C., et al., Am J Med Genet A 126(2):129-140 (2004).
Shibayama, A., et al., Am. J. Med. Genet. B Neuropsychiatr. Genet. 128(1):50-53 (2004).
Fang, J.Y., et al., World J. Gastroenterol. 10(23):3394-3398 (2004).

Images



Immunohistochemical analysis of paraffin-embedded Human brain tissue using AP2545d performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Western blot analysis of MeCP2-S421* (Cat.#AP2545d) in mouse brain, cerebellum tissue and HepG2 cell line lysates (35ug/lane). CP2 (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.