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CYT 19 Rabbit pAb

Catalog # AP96492

Product Information

Application	WB
Primary Accession	Q9HBK9
Other Accession	Q9HBK9
Reactivity	Mouse
Predicted	Rat, Human, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41748
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CYT 19
Epitope Specificity	21-120/375
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the methyltransferase superfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Formation of methylated metabolites is a critical step in the metabolism of inorganic arsenic. Arsenite methyltransferase (cyt19) is localized to the cytoplasm and operates in the transfer of a methyl group from AdoMet to trivalent arsenicals producing methylated and dimethylated arsenicals. It methylates arsenite to form methylarsonate which is reduced to methylarsonite. Methylarsonite acts as a substrate and is converted into a much less toxic compound dimethylarsinate. cyt19 is highly expressed in liver. Inherited variation in cyt19 may contribute to variation in arsenic metabolism and possibly arsenic-dependent carcinogenesis in humans.

Additional Information

Gene ID	57412
Other Names	CYT19; 2310045H08Rik; AS3MT_HUMAN; AS3MT; Methylarsonite methyltransferase; S-adenosyl-L-methionine:arsenic(III) methyltransferase; 2.1.1.137; AS3MT_MOUSE; AS3MT_RAT; arsenite methyltransferase; arsenic (+3 oxidation state) methyltransferase
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	AS3MT
Synonyms	CYT19
Function	Catalyzes the transfer of a methyl group from AdoMet to trivalent arsenicals producing methylated and dimethylated arsenicals (PubMed:16407288, PubMed:25997655). It methylates arsenite to form methylarsonate, Me-AsO(3)H(2), which is reduced by methylarsonate reductase to methylarsonite, Me-As(OH)2 (PubMed:16407288, PubMed:25997655). Methylarsonite is also a substrate and it is converted into the much less toxic compound dimethylarsinate (cacodylate), Me(2)As(O)-OH (PubMed:16407288, PubMed:25997655).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q8VHT6}

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