

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Carm1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Carm1 Lys209-Leu379 Accession # Q86X55
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Knockout Validated	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Carm1 (Coactivator-associated arginine methyltransferase 1; also PRMT4) is a 60-64 kDa member of the Arg N-methyltransferase family of enzymes. It is ubiquitously expressed, and found in the cytoplasm during mitosis, and in the nucleus during the G1, G2 and S phases of the cell cycle. Carm1 binds to nuclear receptor p160 family coactivators. When bound, it methylates DNA-associated histone H3 arginines, allowing for chromatin remodeling and gene activation. It also plays a role in pre-mRNA splicing through its methylation of splicing factors, and regulates the stability of RNA-binding proteins. Human Carm1 is 608 amino acids (aa) in length. It contains one catalytic site between aa 184-394, and a transactivation domain at the C-terminus (aa 499-608). There is one automethylation site at Arg550, and a phosphorylation site at Ser216 that, when utilized, promotes cytosolic localization. Carm1 likely forms homodimers. There are three potential isoform variants. One shows an alternative start site at Met378, a second possesses a 16 aa substitution for aa 369-608, and a third contains a deletion of aa 539-561. Over aa 209-379, human and mouse Carm1 are identical in aa sequence.

PRODUCT SPECIFIC NOTICES

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