

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human α -N-terminal Methyltransferase 1A/METTL11A in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human α -N-terminal Methyltransferase 1A/METTL11A Thr2-Arg223 Accession # Q9BV86
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.

Western Blot 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

METTL11A, also named N-terminal RCC1 methyltransferase (NRMT), is an alpha-N-methyltransferase that methylates the N-terminal amino group of target proteins containing the N-terminal motif [Ala/Pro/Ser]-Pro-Lys when the initiator Met is cleaved (1). It is responsible for N-terminal methylation of RCC1, KLHL31, MYL2, MYL3, RB1, RPL23A and SET. NRMT lacks a SET domain but possesses a Rossmann-like a/b fold. The residues Asn169, Asp178, Asp181, and Ser183 of NRMT are important for substrate binding (2). RCC1 (Ran guanine nucleotide-exchange factor) is the first protein for which any biological function of alpha-N-methylation by NRMT has been identified (3, 4). The multi-spindle phenotype associated with either NRMT knockdown or methylation-defective RCC1 mutants demonstrated the importance of alpha-N-methylation of RCC1 for normal bipolar spindle formation and chromosome aggregation (2). NRMT is robustly overexpressed in gastrointestinal cancers.

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