

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human α -N-terminal Methyltransferase 1A/METTTL11A 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/METTTL11A Thr2-Arg223 Accession # Q9BV86
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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

METTTL11A, 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.