

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VSTM-2A in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 1024718
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell HEK293-derived human VSTM2A Ser25-Phe244 Accession # Q8TAG5-2
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

ELISA 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

V-set and transmembrane domain-containing protein 2A (VSTM2A) is a secreted glycoprotein that is expressed by committed preadipocytes. N-linked glycosylation is crucial for its secretion, but not for preadipocyte cell differentiation activity. It is expressed during adipocyte development and its over-expression promotes adipogenesis (1). VSTM2A is highly expressed in the brain and *Vstm2a* was identified as an enigmatic gene that is highly produced in mouse brain (1, 2). A positive association has been observed between *Vstm2a* and *Pparg2*. VSTM2A plays a role in the regulation of the early stage of white and brown preadipocyte cell differentiation. It promotes adipogenic commitment of preadipocytes by increasing gene expression of the transcription factor PPARG in a BMP4-dependent signaling pathway (1, 3). In humans, two isoforms (1 and 2) exist due to alternative splicing. Human VSTM2A is synthesized either as a 236 amino acid (aa) (Isoform 1) or a 244 aa (Isoform 2) precursor that contains a 24 aa signal sequence followed by the VSTM2A domain. Human Isoform 2 VSTM2A shares 78% aa sequence identity with mouse and rat VSTM2A.

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.