

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse C4.4A in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human C4.4A is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse C4.4A Leu33-His287 Accession # Q91YK8
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.
Immunohistochemistry	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

C4.4A, also known as Ly6/PLAUR domain containing 3 (LYPD-3), is a GPI-linked protein with structural similarity to the urokinase-type plasminogen activator receptor (uPAR) (1). Mature mouse C4.4A contains two uPAR/Ly6 domains and a Ser/Thr/Pro-rich (STP) region that includes a protease sensitive site (2, 3). Mouse C4.4A shares 80% and 92% amino acid sequence identity with human and rat C4.4A, respectively. It is a 65-100 kDa molecule with cell type-specific N- and O-linked glycosylation (4, 5). Proteolytic cleavage following the second uPAR/Ly6 domain generates a 35-40 kDa soluble form, while ADAM10 or ADAM17-mediated cleavage within the STP region generates a 90 kDa soluble form (6-8). Soluble C4.4A can also be shed and released in membrane vesicles (5). C4.4A is expressed in the suprabasal layers of stratified squamous epithelium and is upregulated on migrating keratinocytes during wound healing (6, 7). Its expression is downregulated during the onset of epithelial dysplasia but subsequently upregulated at the invasive front of melanomas and various carcinomas (2, 6, 5, 9). Metastases derived from these tumors also express high levels of C4.4A (2, 5, 6). The interaction of C4.4A with Laminin-1 and -5 on neighboring cells promotes the adhesion, spreading, and migration of tumor cells (4, 6, 10). C4.4A additionally interacts with Galectin-3 and the anterior gradient proteins AG-2 and AG-3 (10, 11). C4.4A over-expression in non-small cell lung cancer is predictive of increased mortality (12).

PRODUCT SPECIFIC NOTICES

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