

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pappalysin-2/PAPP-A2 in direct ELISAs and Western blots. In Western blots, less than 1% cross-reactivity with recombinant human PAPP-A is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Pappalysin-2/PAPP-A2 Ser234-Cys1396 Accession # Q9BXP8
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.
Immunoprecipitation	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

Pappalysins belong to a fifth family of metzincins that consists of ADAMs/ADAMTSs, MMPs, astacins and serrylsins (1, 2). PAPP-A is an important pregnancy protein and increases in plasma by a factor of about 150 during pregnancy as compared to the nonpregnant state. PAPP-A is also a major marker of Down syndrome in the first trimester of pregnancy because maternal serum levels of PAPP-A are significantly reduced when a fetus affected by Down syndrome is present (3). PAPP-A cleaves Insulin-like Growth Factor-Binding Protein-4 and -5 (IGFBP-4 and -5) at a single site, resulting in the release of bioactive IGF (4). Compared to PAPP-A, PAPP-A2 (also called PAPP-E), the second member of the family is less characterized. PAPP-A2 shares 45% amino acid identity to PAPP-A in the mature form, which is synthesized as a preproprotein consisting of multiple domains (1). The prepro region (residues 1-233) and the C-terminal region (residues 1397-1791) are not included in recombinant human PAPP-A2. As an active protease, recombinant human PAPP-A2 cleaves IGFBP-5.

PRODUCT SPECIFIC NOTICES

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