

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cyr61/CCN1 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 434311
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Cyr61/CCN1 Ala22-Asp381 Accession # O00622
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.

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

Cyr61, also known as CCN1, is a 40 - 45 kDa matricellular glycoprotein that plays an important role in cellular adhesion and migration (1). Cyr61 consists of an IGF1R domain, a VWF type C domain, a TSP type I domain, and a cysteine knot domain (2). Mature human Cyr61 shares 93% amino acid sequence identity with mouse and rat Cyr61. It is widely expressed during development and in adult tissues (2, 3). Cyr61 associates with the extracellular matrix (ECM) and with many cell surface molecules including Integrins αVβ3, αVβ5, αMβ2, and α6β1, Syndecan-4, and heparan sulfate proteoglycans (1, 3). Cyr61 mediates the adhesion and migration of multiple cell types and also promotes vascular endothelial cell tubule formation (4 - 6). Plasmin cleavage of ECM-bound Cyr61 releases a 28 kDa N-terminal fragment which retains the ability to promote endothelial cell migration (7). Cyr61 exhibits both tumorigenic and tumor suppressor properties. It is upregulated and promotes tumorigenesis, angiogenesis, and metastasis in breast, renal, gastric, squamous cell, and colorectal carcinomas as well as in glioma (8 - 12). In contrast, when downregulated, it suppresses tumor growth in endometrial, hepatic, and non-small cell lung cancers (8, 13, 14). Cyr61 is also upregulated in injured skin and bone where it induces the expression of growth factors, cytokines, proteases, and integrins involved in wound repair (15, 16).

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.