

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                                                           |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human uPAR in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse uPAR is observed. |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                                                                             |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                                                       |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant human uPAR<br>Leu23-Arg303<br>Accession # Q03405                                                |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                 |
| <b>Formulation</b>                                                                                                                                                                                      | 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.

|                                                |                                                                        |
|------------------------------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>                            | Optimal dilution of this antibody should be experimentally determined. |
| <b>Blockade of Receptor-ligand Interaction</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b>                    | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b>                     | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

The urokinase-type Plasminogen Activator (uPA) is one of two activators that converts the extracellular zymogen plasminogen to plasmin, a serine protease that is involved in a variety of normal and pathological processes that require cell migration and/or tissue destruction. uPA is synthesized and released from cells as a single-chain (sc) pro-enzyme with limited enzymatic activity and is converted to an active two-chain (tc) disulfide-linked active enzyme by plasmin and other specific proteinases. Both the scuPA and tcuPA bind with high-affinity to the cell surface via the glycosyl phosphatidylinositol-linked receptor uPAR which serves to localize the uPA proteolytic activity. The enzymatic activity of scuPA has also been shown to be enhanced by binding to uPAR. Independent of their proteolytic activity, the uPA/uPAR interaction also initiates signal transduction responses resulting in activation of protein tyrosine kinases, gene expression, cell adhesion, and chemotaxis. uPAR can interact with integrins to suppress normal integrin adhesive function and promote adhesion to vitronectin through a high affinity vitronectin binding site on uPAR. uPAR cDNA encodes a 335 amino acid (aa) residue precursor protein with a 22 aa residue signal peptide, five potential N-linked glycosylation sites and a C-terminal GPI-anchor site. An alternate spliced variant of uPAR encoding a secreted soluble form of uPAR also exists. Human and mouse uPAR share approximately 60% aa sequence identity and the receptor-ligand interaction is strictly species-specific.

## PRODUCT SPECIFIC NOTICES

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