

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Bikunin in direct ELISAs and Western blots.                                            |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                                 |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                            |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant human Bikunin<br>Ala206-Asn352<br>Accession # P02760 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 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.

**Western Blot** 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

Bikunin (also known as Ial light chain, EDC1, HI30 and Trypstatin) is a secreted, 35-45 kDa proteoglycan member of the kunin family of serine protease inhibitors. It is expressed by hepatocytes, amniotic epithelium and mesothelial cells. Bikunin possesses both sulfated and nonsulfated GAG sequences. The nonsulfated sequences are known to form ester linkages with two 80 kDa "heavy" chains in the hepatocyte Golgi, forming 180-200 kDa Ial. This molecule participates in the formation of hyaluronan-containing ECM. In addition, one of the H chains of Ial can be displaced by TSG6, creating an antiplasmin complex. Human bikunin is generated through cleavage of a precursor molecule termed AMBP. This AMBP should not be confused with AMBP-1, a 120-140 kDa adrenomedullin-binding protein that is also known as Complement Factor H. The AMBP precursor contains a 19 aa signal sequence, an N-terminal 183 aa A1M protein (aa 20-203), and the C-terminal serine protease inhibitor bikunin (aa 206-352). Bikunin possesses one GAG attachment site at Ser215, two Kunitz inhibitor domains (aa 231-281 and 287-337) and one utilized N-linked glycosylation site at Asn250. Although cleavage of AMBP in the Golgi may result in release of free bikunin, the 60-65 kDa AMBP precursor can also be released intact. Over aa 206-352, human bikunin shares 77% aa sequence identity with mouse bikunin.

#### PRODUCT SPECIFIC NOTICES

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