

## DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human HAI-2 in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant mouse HAI-2B and recombinant human HAI-1 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 HAI-2A (R&D Systems, Catalog # 1106-PI)<br>Ala28-Lys197<br>Accession # O43291   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.  |

## 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>Recommended Concentration</b> | <b>Sample</b>  |
|---|----------------------------------|--|
| <b>Western Blot</b>                     | 0.1 µg/mL                        | Recombinant Human HAI-2  |
| <b>Human HAI-2 Sandwich Immunoassay</b> |                                  | <b>Reagent</b>   |
| <b>ELISA Capture</b>                    | 2-8 µg/mL                        | Human HAI-2 Ectodomain Antibody (Catalog # <a href="#">MAB1106</a> )   |
| <b>ELISA Detection</b>                  | 0.1-0.4 µg/mL                    | Human HAI-2 Biotinylated Antibody (Catalog # <a href="#">BAF1106</a> ) |
| <b>Standard</b>                         |                                  | Recombinant Human HAI-2A (Catalog # <a href="#">1106-PI</a> )          |

## PREPARATION AND STORAGE

|                                |   |
|--------------------------------|---|
| <b>Reconstitution</b>          | Reconstitute at 0.2 mg/mL in sterile PBS.   |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.   |
| <b>Stability &amp; Storage</b> | <p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

Two alternatively spliced forms of HAI-2 have been found in human tissues (1). HAI-2A, the full-length molecule and also known as placental bikunin, is a major form expressed in human tissues. Encoded by the SPINT2 gene, HAI-2A consists of two Kunitz domains, and a C-terminal transmembrane domain (1 - 5). Both Kunitz domains can function as inhibitors independent of each other. In addition to HGF activator and trypsin, HAI-2A strongly inhibits plasmin, tissue and plasma kallikreins, and factor XIa. In comparison, HAI-2A is a weaker inhibitor of factor VIIa-tissue factor, factors IXa, Xa, and XIIa.

### References:

1. Kataoka, H. *et al.* (2002) *Biochem. Biophys. Res. Comm.* **290**:1096.
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3. Marlor, C.W. *et al.* (1997) *J. Biol. Chem.* **272**:12202.
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