

## Datasheet: AHP1211

| Description:  | GOAT ANTI HUMAN SDF-1 BETA |
|---------------|----------------------------|
| Specificity:  | SDF-1 BETA                 |
| Other names:  | CXCL12b                    |
| Format:       | Purified                   |
| Product Type: | Polyclonal Antibody        |
| lsotype:      | Polyclonal IgG             |
| Quantity:     | 0.1 mg                     |
|               |                            |

## **Product Details**

| Applications                | This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further |            |             |                        |                      |  |
|-----------------------------|--|------------|-------------|------------------------|----------------------|--|
|                             | information. For general protocol recommendations, please visit <u>www.bio-</u>  |            |             |                        |                      |  |
|                             | rad-antibodies.com/protocols.  |            |             |                        |                      |  |
|                             |  | Yes        | No          | Not Determined         | Suggested Dilution   |  |
|                             | Flow Cytometry   |            |             | •                      |                      |  |
|                             | Immunohistology - Frozen   |            |             | •                      |                      |  |
|                             | Immunohistology - Paraffin   |            |             | •                      |                      |  |
|                             | ELISA  | •          |             |                        | 0.5ug/ml             |  |
|                             | Immunoprecipitation  |            |             | •                      |                      |  |
|                             | Western Blotting   |            |             |                        | 0.1 - 0.2ug/ml       |  |
|                             | Where this product has n   | ot been te | ested for u | se in a particular teo | hnique this does not |  |
|                             | necessarily exclude its us<br>a guide only. It is recomn<br>system using appropriate   | nended the | at the use  | r titrates the product |                      |  |
| Target Species              | Human  |            |             |                        |                      |  |
| Product Form                | Purified IgG - lyophilized   |            |             |                        |                      |  |
| Reconstitution              | Reconstitute with 0.1 ml distilled water. For long term storage the addition of 0.09% sodium azide is recommended.   |            |             |                        |                      |  |
| Antiserum Preparation       | Antisera to human SDF-<br>highly purified antigen. P   |            |             | <i>.</i>               | •                    |  |
| Buffer Solution             | Phosphate buffered salin   | e          |             |                        |                      |  |
| Preservative<br>Stabilisers | None present   |            |             |                        |                      |  |

| Carrier Free                      | Yes   |  |
|-----------------------------------|---|--|
| Approx. Protein<br>Concentrations | IgG concentration 1.0 mg/ml   |  |
| Immunogen                         | Recombinant human SDF-1 beta.   |  |
| External Database<br>Links        | UniProt:  |  |
|                                   | P48061 Related reagents   |  |
|                                   | Entrez Gene:  |  |
|                                   | 6387 CXCL12 Related reagents  |  |
| Synonyms                          | SDF1, SDF1A, SDF1B  |  |
| RRID                              | AB_844599   |  |
| Specificity                       | <b>Goat anti Human SDF-1 beta antibody</b> recognizes human SDF-1 beta, otherwise known as CXCL12b, a 72 amino acid stromal cell derived CXC chemokine, which arises from alternative splicing of the SDF-1 gene. The two isoforms, SDF-1 alpha and SDF-1 beta, share an identical amino acid sequence, except for an additional four residues in the C-Terminal region of the beta isoform.  |  |
|                                   | SDF-1 binds with high-affinity to the G protein–coupled receptor CXCR4 (fusin) and acts as a chemoattractant for T and B lymphocytes, monocytes and migratory neurons, and is a vital factor in haematopoiesis and angiogenesis. By competitively binding to CXCR4, SDF-1 acts as an inhibitor for the CXCR4-mediated entry of HIV-1 virus into target T-cells, and the SDF-1-CXCR4 interaction is important for the regulation of trafficking of normal and malignant stem cells.  |  |
| Further Reading                   | <ol> <li>Nagasawa, T. <i>et al.</i> (1998) A novel CXC chemokine PBSF/SDF-1 and its receptor<br/>CXCR4: their functions in development, hematopoiesis and HIV infection. <u>Semin Immunol.</u><br/><u>10 (3): 179-85.</u></li> <li>Stumm, R. &amp; Höllt, V. (2007) CXC chemokine receptor 4 regulates neuronal migration<br/>and axonal pathfinding in the developing nervous system: implications for neuronal<br/>regeneration in the adult brain. <u>J Mol Endocrinol.</u> <u>38 (3): 377-82.</u></li> <li>Kucia, M. <i>et al.</i> (2005) Trafficking of normal stem cells and metastasis of cancer stem<br/>cells involve similar mechanisms: pivotal role of the SDF-1-CXCR4 axis. <u>Stem Cells.</u> <u>23</u><br/>(7): 879-94.</li> </ol> |  |
| Storage                           | Prior to reconstitution store at -20°C.<br>After reconstitution store at -20°C.   |  |
|                                   | This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.   |  |

| Guarantee                          | 12 months from date of despatch   |
|------------------------------------|---|
| Health And Safety<br>Information   | Material Safety Datasheet documentation #10294 available at <a href="https://www.bio-rad-antibodies.com/SDS/AHP1211">https://www.bio-rad-antibodies.com/SDS/AHP1211</a> 10294 |
| Regulatory                         | For research purposes only  |
| Related Produce Recommended Second | cts<br>econdary Antibodies  |
| Rabbit Anti Goat Ig0               | G (Fc) (STAR122) <u>FITC</u> , <u>HRP</u>   |

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M428139:240301'

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