Medix Biochemica

**Product specification**
**ANTIBODY**
2025-04-24

# Anti-h HBP 12201 SPTN-5

## Product overview

| | |
|---|---|
| **Catalog number** | 100969 |
| **Specificity** | Antibody recognizes human heparin binding protein |
| **Description** | Monoclonal mouse antibody, cultured *in vitro* under conditions free from animal-derived components. |
| **Product buffer solution** | 50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % $NaN_3$ as a preservative |
| **Shelf life and storage** | Unspecified, storage at 2–8 °C |
| **Subclass** | $IgG_1$ |
| **Analyte description** | Heparin binding protein (HBP), also known as azurocidin or cationic antimicrobial protein of 37 kDa (CAP37), is an acute inflammatory glycoprotein released by activated neutrophils in response to bacterial infections. HBP is a promising biomarker for early diagnosis and prognosis of sepsis. |

## Parameters tested on each lot

| | |
|---|---|
| **Product appearance** | Liquid, may turn slightly opaque during storage |
| **Product concentration** | 5.0 mg/ml (+/-10 %) |
| **Immunoreactivity** | 80–120 % compared to the reference sample in an FIA test |
| **IEF Profile** | 5.5–6.1 |
| **Purity** | ≥ 95 % |

## Kinetic parameters

| | |
|---|---|
| **Association rate constant** | $7.2 \times 10^5$ 1/Ms |
| **Dissociation rate constant** | $1.5 \times 10^{-4}$ 1/s |
| **Affinity constant** | KA = $4.7 \times 10^9$; KD = $2.6 \times 10^{-10}$ M (= 0.26 nM) |
| **Determination method** | BLI analysis (Octet RED96e) |
| **Determination antigen** | Azurocidin, Medix Biochemica, cat 125-75 |

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**Cross-reactivities** Does not recognize Cathepsin G, Elastase or Proteinase 3.

**Epitope** N/D

**Pair recommendations**

| | | DETECTION | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12201 | 12202 | B-P37 | B-R37 | HM721 | HM722 |
| CAPTURE | 12201 | - | + | - | - | - | + |
| | 12202 | + | - | + | + | + | - |
| | B-P37 | - | + | - | - | - | + |
| | B-R37 | - | + | - | - | - | + |
| | HM721 | - | + | - | - | - | + |
| | HM722 | + | - | + | + | + | - |

Following pairs are especially recommended for the below mentioned assays:
FIA: 12201 (capture) – 12202 (detection), and 12202 – 12201, 12201 – HM722, B-R37 – 12202

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

**Platforms tested** FIA

**Antigens tested** Native Azurocidin antigen Medix Biochemica 125-75

**Product stability**

| TEMPERATURE, TIME | RESULT |
|---|---|
| -70 °C, 21 days | OK |
| -20 °C, 21 days | OK |
| +4 °C, 21 days | OK |
| +35 °C, 7 days | OK |
| +35 °C, 21 days | Reduced immunoreactivity |
| +45 °C, 3 days | OK |
| +45 °C, 7 days | Reduced immunoreactivity |

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody.

**Miscellaneous** -

**References** -

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