



# Goat interleukin 12,IL-12/P40 ELISA KIT

|                             |                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>         | CSB-E12103G                                                                                                                                                             |
| <b>Abbreviation</b>         | IL12B                                                                                                                                                                   |
| <b>Target Name</b>          | interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)                                                               |
| <b>Uniprot No.</b>          | P68221                                                                                                                                                                  |
| <b>Alias</b>                | CLMF, CLMF2, IL-12B, NKSF, NKSF2, IL12, subunit p40 interleukin 12, p40 interleukin 12B interleukin-12 beta chain natural killer cell stimulatory factor, 40 kD subunit |
| <b>Product Type</b>         | ELISA Kit                                                                                                                                                               |
| <b>Immunogen Species</b>    | Capra hircus (Goat)                                                                                                                                                     |
| <b>Sample Types</b>         | serum, plasma, tissue homogenates, cell lysates                                                                                                                         |
| <b>Detection Range</b>      | 9.38 pg/mL-600 pg/mL                                                                                                                                                    |
| <b>Sensitivity</b>          | 2.34 pg/mL                                                                                                                                                              |
| <b>Assay Time</b>           | 1-5h                                                                                                                                                                    |
| <b>Sample Volume</b>        | 50-100ul                                                                                                                                                                |
| <b>Detection Wavelength</b> | 450 nm                                                                                                                                                                  |
| <b>Lead Time</b>            | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.                                                                |
| <b>Research Area</b>        | Immunology                                                                                                                                                              |
| <b>Gene Names</b>           | IL12B                                                                                                                                                                   |
| <b>Tag Info</b>             | quantitative                                                                                                                                                            |
| <b>Protein Description</b>  | Sandwich                                                                                                                                                                |

|                    |                                                                                                                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b> | This Goat IL12B ELISA Kit was designed for the quantitative measurement of Goat IL12B protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 9.38 pg/mL-600 pg/mL and the sensitivity is 2.34 pg/mL. |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Details</b> | This gene encodes a subunit of interleukin 12, a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. Interleukin 12 is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. This cytokine has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Overexpression of this gene was observed in the central nervous system of patients with multiple sclerosis (MS), suggesting a role of this cytokine in the pathogenesis of the disease. The |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



promoter polymorphism of this gene has been reported to be associated with the severity of atopic and non-atopic asthma in children.

### Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

### Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of goat IL-12/P40 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

|     | Sample    | Serum(n=4) |
|-----|-----------|------------|
| 1:1 | Average % | 95         |
|     | Range %   | 89-102     |
| 1:2 | Average % | 86         |
|     | Range %   | 82-97      |
| 1:4 | Average % | 93         |
|     | Range %   | 85-102     |
| 1:8 | Average % | 95         |
|     | Range %   | 89-105     |

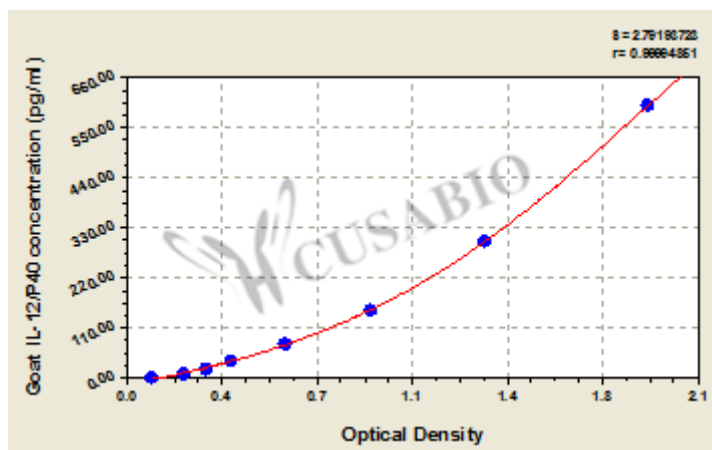
### Recovery

The recovery of goat IL-12/P40 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range |
|-------------------|--------------------|-------|
| Serum (n=5)       | 85                 | 81-90 |
| EDTA plasma (n=4) | 92                 | 87-96 |

### Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



| pg/ml | OD1   | OD2   | Average | Corrected |
|-------|-------|-------|---------|-----------|
| 600   | 1.974 | 1.942 | 1.958   | 1.857     |
| 300   | 1.331 | 1.362 | 1.347   | 1.246     |
| 150   | 0.912 | 0.924 | 0.918   | 0.817     |
| 75    | 0.587 | 0.612 | 0.600   | 0.499     |
| 37.5  | 0.401 | 0.388 | 0.395   | 0.294     |
| 18.75 | 0.295 | 0.309 | 0.302   | 0.201     |
| 9.37  | 0.214 | 0.225 | 0.220   | 0.119     |
| 0     | 0.102 | 0.100 | 0.101   |           |

## Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-E12103G.pdf",
    "filename": "MSDS"
  }
}
```