

Active Interleukin 12B (IL12B) Instruction Manual

SBPA037Hu01

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 95%

Isoelectric Point

5.5

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

V YVELDWYPD APGEMVVLTC
DTPEEDGITW TLDQSSEVLG SGKTLTIQVK EFGDAGQYTC HKGGEVLSHS
LLLLLHKKEDG IWSTDILKDQ KEPKNKTFRL CEAKNYSGRF TCWTLTTIST
DLTFSVKSSR GSSDPQGVTC GAATLSAERV RGDNKEYEYS VECQEDSACP
AAEESLPIEV MDAVHKLKY ENYTSSFFIR DIIKPDPPKN LQLKPLKNSR
QVEVSWEYPD TWSTPHSYFS LTFCVQVQVK SKREKKDRVF TDKTSATVIC
RKNASISVRA QDRYYSSWS

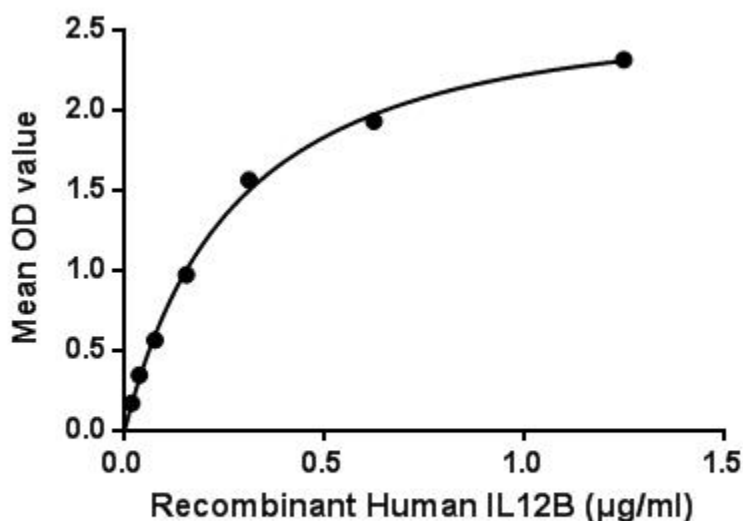


Figure 1. The binding activity of IL12B with IL12Rb1.

Interleukin 12B (IL12B) 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. Interleukin 12B can combine with Interleukin 12 Receptor Beta 1 (IL12Rb1). Thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL12B and recombinant human IL12Rb1. Briefly, biotin-linked recombinant human IL12B were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl then transferred to IL12Rb1-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST 3 times and incubation with HRP conjugate for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of IL12B and IL12Rb1 was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

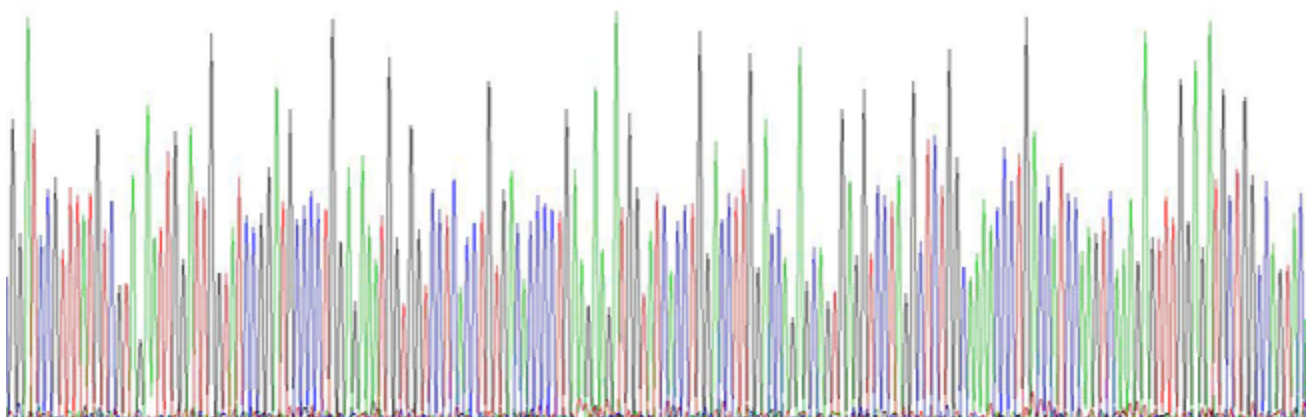
STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Image

Figure. SDS-PAGE

CGATDCGTTTATGTGTA GAA TTGGAT TGGTA TCGGAT TGCDCCTGGAGAA TGGTGGTCTCACCCTGTGACACCCCTG AAGAGAT GGTATCACTGGACCTTGGACAGAGCA GTGAGGTCTAGGCCTGGCAAAACCTGACCA TCCAA GTCAAGAGTTTGGAGTCTGGSCAGTAC



[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.