Human Interleukin-12 protein (Recombinant) (STJP000505)

GENERAL INFORMATION

Product Type	Proteins
Host / Source	HEK293

PRODUCT PROPERTIES

Formulation	Lyophilised from 0.2 Mu m filtered PBS solution pH7.5.
Molecular Weight	Native human Interleukin-12, generated by the proteolytic removal of the signal peptide and propeptide, the molecule has a calculated molecular mass of approximately 75 kDa. Recombinant Interleukin-12 is a disulfide-linked heterodimer protein consist
Storage Instruction	Can be stored in working aliquots at°C-°C C for one month, or at-20°C C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles. NA

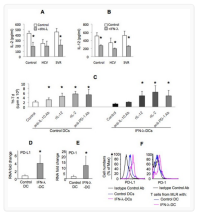
TARGET INFORMATION

Gene ID	3593
Gene Symbol	IL12B
UniProt ID	IL12B_HUMAN
Immunogen Region	Mature chain
Immunogen Sequence	MCHQQLVISW FSLVFLASPL VAIWELKKDV YVVELDWYPD APGEMVVLTC DTPEEDGITW TLDQSSEVLG SGKTLTIQVK EFGDAGQYTC HKGGEVLSHS LLLLHKKEDG IWSTDILKDQ KEPKNKTFLR CEAKNYSGRF TCWWLTTIST DLTFSVKSSR GSSDPQGVTC GAATLSAERV RGDNKEYEYS VECQEDSACP AAEESLPIEV MVDAVHKLKY ENYTSSFF

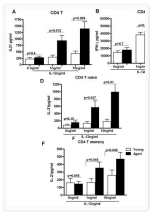
ADDITIONAL INFORMATION

Note	STRICTLY FOR FURTHER RESEARCH USE ONLY (RUO). MUST NOT TO BE USED IN DIAGNOSTIC OR THERAPEUTIC APPLICATIONS.

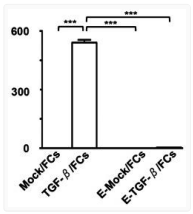
The image depicts the log of the fold change of NK genes regulated due to co-culture with 3D7-infected erythrocytes (iRBCs) or with the cytokines IL-12 andIL-18.



NK92 cells were kept in two different environments for 24 hours prior to the co-culture: in normal cell medium NA >medium medium NA > (+rIL2; NK92 nm) and in cell medium NA >medium without rIL-2 (starvation medium NA >medium; NK92s). Cells from both environments were co-cultured with 3D7 schizont-infected erythrocytes and uRBCs (NK92-RBCs ratio: 1:3) in their respective growth medium. As a positive control, cells were also incubated with a mixture of IL-12 and IL-18 (and MBL, respectively; 100 ng/106 cells each). After the indicated time of incubation at 37°C and 5% CO2, NK cells from the co-culture as well as cells incubated without RBCs were stained for 30 min at 4°C with fluorochrome-conjugated antibodies for surface CD56 (APC) , CD3 (PE) , CD16 (FITC) , CD69 (FITC) , CD25 (PE) in parallel with the appropriate isotype controls. Cells were also internally stained with the IFN-Gamma (PE) antibody (all…



Purified human na i ve CD4 T cells were stimulated with irradiated (100Gy) allogeneic Epstein-Barr virus (EBV) – transformed B cells (1:1 ratio) in complete medium NA >RPMI-8 medium at 105 cells/mL in round-bottom 96-well plate. Th1-biased cultures contained recombinant human IL-2 (5 ng/mL) , recombinant human IL-12 (20 ng/mL) and anti-IL-4 (5 µg/ml&). Th2-biased cultures contained recombinant human IL-2 (5 ng/mL) , recombinant human IL-4 (20 ng/mL&) , anti-IL-12 (5 µg/ml, ebioscience) and anti-IFN Gamma (5 µg/ml&). Fresh medium containing 5 ng/mL IL-2 was added if necessary to cultures showing strong proliferation. The cultures were restimulated and expanded every seven days.



Co-culture supernatants from indicated groups were analyzed for IL-2, IL-12 by ELISA; mean±SD pg/ml shown.