

Human CellExp IL-7, human recombinant protein

IL-7, IL7, Interleukin-7 Catalog # PBV10899r

Specification

Human CellExp IL-7, human recombinant protein - Product info

Primary Accession P13232

Calculated MW of 17 kDa with no tag. The

predicted N-terminus is Asp26.

DTT-reduced protein migrates as 19 kDa,

22 kDa and 26 kDa protein due to

glycosylation. KDa

Human CellExp IL-7, human recombinant protein - Additional Info

Gene ID 3574
Gene Symbol IL-7

Other Names

IL-7, IL7, Interleukin-7

Gene Source Human

Source HEK 293 cells
Assay&Purity SDS-PAGE; ≥95%

Assay2&Purity2 N/A;
Recombinant Yes

Target/Specificity

IL-7

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of $50 \,\mu g/ml$. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized powder

Storage

-20°C; Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

Human CellExp IL-7, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Human CellExp IL-7, human recombinant protein - Images

Human CellExp IL-7, human recombinant protein - Background

Interleukin 7, also known as IL7, IL-7, and is a hematopoietic growth factor secreted by stromal cells in the red marrow and thymus. It is also produced by keratinocytes, dendritic cells, hepatocytes, neurons, and epithelial cells but is not produced by lymphocytes. IL-7 stimulates the differentiation of multipotent (pluripotent) hematopoietic stem cells into lymphoid progenitor cells. It also stimulates proliferation of all cells in the lymphoid lineage (B cells, T cells and NK cells). It is important for proliferation during certain stages of B-cell maturation, T and NK cell survival, development and homeostasis. IL-7 is a cytokine important for B and T cell development. This cytokine and the hepatocyte growth factor (HGF) form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. IL-7 binds to the IL-7 receptor, a heterodimer consisting of Interleukin-7 receptor alpha and common gamma chain receptor. Il-7 promotes hematological malignacies (acute lymphoblastic leukemia, T cell lymphoma). Elevated levels of IL-7 have also been detected in the plasma of HIV-infected patients. IL-7 as an immunotherapy agent has been examined in many pre-clinical animal studies and more recently in human clinical trials for various malignancies and during HIV infection. IL-7 could also be beneficial in improving immune recovery after allogenic stem cell transplant.

Human CellExp IL-7, human recombinant protein - References

Goodwin R.G.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:302-306(1989). Lupton S.D.,et al.J. Immunol. 144:3592-3601(1990). Sameshima E.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases. Livingston R.J.,et al.Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases. Nusbaum C.,et al.Nature 439:331-335(2006).