

重组人白介素7

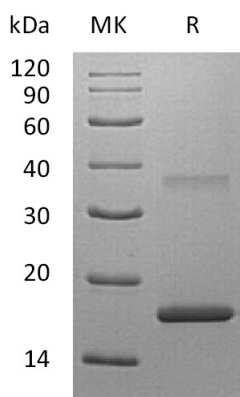
IL-7,Human;RecombinantHumanInterleukin7

Cat. No.: MB5953 Size: 10µg/50µg

Source:	E.coli
Description:	Recombinant Human Interleukin-7 is produced by our E.coli expression system and the target gene encoding Asp26-His177 is expressed.
Accession:	P13232
Known As:	Interleukin-7; IL-7; IL7
Predicted Mol Mass:	17.5 KDa
Apparent Mol Mass:	18 KDa, reducing conditions
Endotoxin:	< 1 EU/µg as determined by LAL test.
Formulation:	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 300mM NaCl, pH 8.0.
Reconstitution:	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage:	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Background:	Human Interleukin 7 (IL-7) is a potent lymphoid cell growth factor stimulating the proliferation of lymphoid progenitors. IL7 can associate with the hepatocyte growth factor (HGF) to form a hybrid cytokine that functions as a pre-pro-B cell growth-stimulating factor. Human IL7 cDNA encodes a 177 amino acid precursor protein containing a 25 amino acid signal peptide and a 152 amino acid mature protein. Human and mouse IL7 share 65% sequence identity in the mature region and both exhibit cross-species activity. IL-7 signals via IL-7 receptor (IL7R) activating multiple pathways including Jak/STAT and PI3K/AKT, which regulate lymphocyte survival, glucose uptake, proliferation, and differentiation. IL-7 is also associated with cytoplasmic IL2-R gamma for signal transduction.

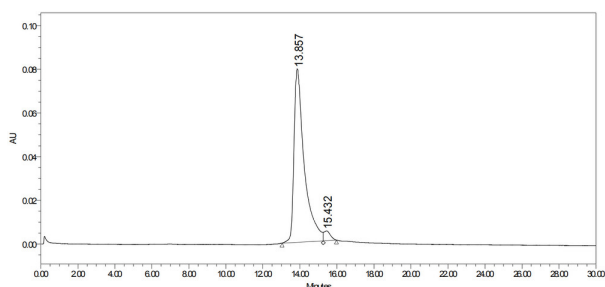


Purity-SDS-PAGE:



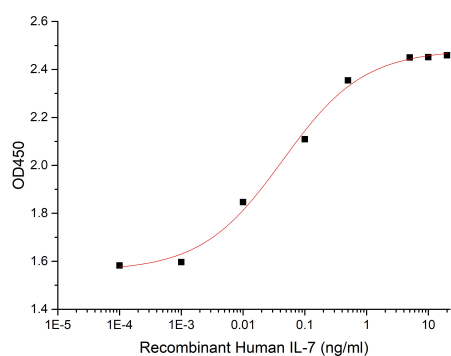
Greater than 95% as determined by reducing SDS-PAGE.

Purity-SEC-HPLC:



Greater than 95% as determined by SEC-HPLC. (Regularly tested)

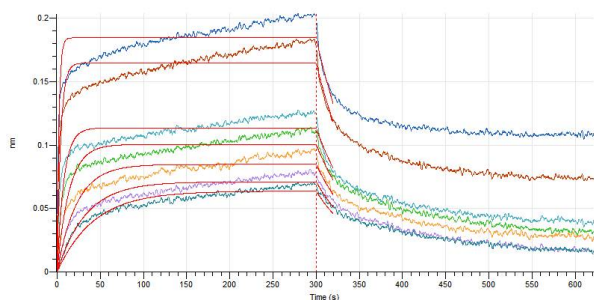
Bioactivity-Cell Based Assay:



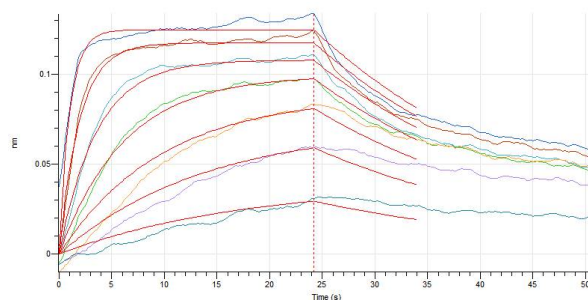
Measured in a cell proliferation assay using PHA-activated human peripheral blood lymphocytes (PBL). The ED50 for this effect is 0.02-0.08 ng/ml.

Bioactivity-BLI:

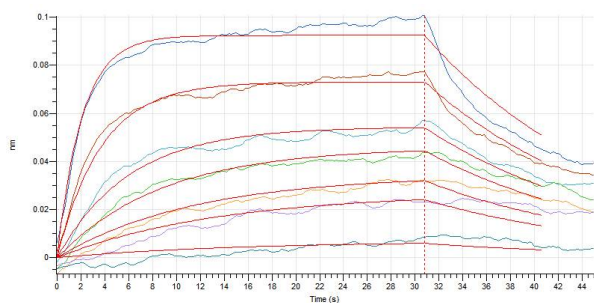




Loaded Human IL-7RA-His on HIS1K Biosensor, can bind Human IL-7 (Cat#MB5953) with an affinity constant of 15.04 nM as determined in BLI assay.



Loaded Human IL-7RA-Fc-His on HIS1K Biosensor, can bind Human IL-7(Cat#MB5953) with an affinity constant of 18.59 nM as determined in BLI assay.



Loaded Mouse IL-7RA-Fc on Protein A Biosensor, can bind Human IL-7(Cat#MB5953) with an affinity constant of 29.2 nM as determined in BLI assay.

