

# Datasheet for ABIN7321255

### **IL-10 Protein**



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Quantity:	20 μg
Target:	IL-10 (IL10)
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

#### **Product Details**

Purpose:	Recombinant Rat IL-10/Interleukin-10 Protein (Active)
Sequence:	Ser19-Asn178
Characteristics:	A DNA sequence encoding the rat IL10 (NP_036986.2) (Ser19-Asn178) was expressed and purified with an initial Met.
Purity:	> 80 % as determined by SDS-PAGE
Biological Activity Comment:	Measured in a cell proliferation assay using MC/9-2 mouse mast cells. The ED50 for this effect is typically 2-8 ng/mL.

# Target Details

Target:	IL-10 (IL10)	
Alternative Name:	IL-10/Interleukin-10 (IL10 Products)	
Background: Background: IL-10 is a anti-inflammatory cytokine which belongs to the IL-10		
	produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell	

types, while it is produced primarily by monocytes and to a lesser extent by lymphocytes. IL-10 is mainly expressed in monocytes and Type 2 T helper cells (TH2), mast cells, CD4+CD25+Foxp3+ regulatory T cells, and also in a certain subset of activated T cells and B cells. IL-10 has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. IL-10 can block NFkappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract. The importance of interleukin 10 for counteracting excessive immunity in the human body is revealed by the fact that patients with Crohn's disease react favorably towards treatment with bacteria producing recombinant IL-10. IL-10 inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by helper T-cells. It also displays a potent ability to suppress the antigenpresentation capacity of antigen presenting cells. However, it is also stimulatory towards certain T cells and mast cells and stimulates B cell maturation and antibody production.Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy Synonym: IL10;II-10

Molecular Weight: 18.6 kDa

NCBI Accession:

Pathways:

Cellular Response to Molecule of Bacterial Origin, Regulation of Leukocyte Mediated Immunity,
Production of Molecular Mediator of Immune Response, Maintenance of Protein Location,
Cancer Immune Checkpoints

### **Application Details**

Restrictions: For Research Use only

NP 036986

#### Handling

Format:

Lyophilized

Reconstitution:

Please refer to the printed manual for detailed information.

Lyophilized from sterile PBS, 10 % glycerol.

Storage:

4 °C,-20 °C,-80 °C

Storage Comment:

Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.