abcam

Product datasheet

Human CD127 ELISA Kit ab213799

画像数 1

製品の概要

製品名 Human CD127 ELISA Kit

検出方法 Colorimetric

再現性

Intra-Assay（同時再現性）

サンプル	N	平均値	SD	CV%
1	16	410pg/ml	25.42	= 6.2%
2	16	2617pg/ml	120.38	= 4.6%
3	16	9061pg/ml	516.47	= 5.7%

Inter-Assay（日差再現性）

サンプル	N	平均値	SD	CV%
1	24	443pg/ml	33.22	= 7.5%
2	24	2807pg/ml	140.35	= 5%
3	24	9233pg/ml	627.84	= 6.8%

サンプルの種類 Cell culture supernatant, Serum

アッセイタイプ Sandwich (quantitative)

検出感度 < 10 pg/ml

検出範囲 312 pg/ml - 20000 pg/ml

全工程の試験時間 3h 30m

ステップ Multiple steps standard assay

種交差性 **交差種:** Human

製品の概要 The Human CD127 Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213799) is designed for the quantitative detection of Human CD127 in cell culture supernatants and serum.

The ELISA kit is based on standard sandwich enzyme-linked immunosorbent assay technology. A polyclonal antibody from goat specific for CD127 has been pre-coated onto 96-well plates.

Standards (Expression system for standard: NSO; Immunogen sequence: E21-I262) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD127 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human CD127 amount of sample captured in plate.

特記事項

CD127 (also known as interleukin-7 receptor or IL-7R) is a protein found on the surface of cells. It is mapped to 5p13.2. The protein encoded by this gene is a receptor for interleukin 7 (IL-7). The function of this receptor requires the interleukin 2 receptor, gamma chain (IL-2RG), which is a common gamma chain shared by the receptors of various cytokines, including interleukin 2, 4, 7, 9, and 15. CD127 has been shown to play a critical role in the development of immune cells called lymphocytes-specifically in a process known as V (D) J recombination. This protein is also found to control the accessibility of a region of the genome that contains the T-cell receptor gamma gene, by STAT5 and histone acetylation. What's more, CD127 antagonism is efficacious in treatment of EAE through its effects on Th17 cells and is a potential treatment for MS.

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

製品の特性

保存方法

Store at -20°C. Please refer to protocols.

内容	ラベル	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-Human CD127 coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti-Human CD127 antibody		1 x 100µl
Lyophilized recombinant Human CD127 standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml
Wash Buffer (25X)		1 x 20ml

機能

Receptor for interleukin-7. Also acts as a receptor for thymic stromal lymphopoietin (TSLP).

関連疾患

Defects in IL7R are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (T(-)B(+)NK(+) SCID) [MIM:608971]. A form of severe combined immunodeficiency (SCID), a genetically and clinically heterogeneous group of rare

congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients present in infancy recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.
Genetic variations in IL7R are a cause of susceptibility to multiple sclerosis type 3 (MS3) [MIM:612595]. A multifactorial, inflammatory, demyelinating disease of the central nervous system. Sclerotic lesions are characterized by perivascular infiltration of monocytes and lymphocytes and appear as indurated areas in pathologic specimens (sclerosis in plaques). The pathological mechanism is regarded as an autoimmune attack of the myelin sheat, mediated by both cellular and humoral immunity. Clinical manifestations include visual loss, extra-ocular movement disorders, paresthesias, loss of sensation, weakness, dysarthria, spasticity, ataxia and bladder dysfunction. Genetic and environmental factors influence susceptibility to the disease.
Note=A polymorphism at position 244 strongly influences susceptibility to multiple sclerosis. Overtransmission of the major 'C' allele coding for Thr-244 is detected in offspring affected with multiple sclerosis. In vitro analysis of transcripts from minigenes containing either 'C' allele (Thr-244) or 'T' allele (Ile-244) shows that the 'C' allele results in an approximately two-fold increase in the skipping of exon 6, leading to increased production of a soluble form of IL7R. Thus, the multiple sclerosis associated 'C' risk allele of IL7R would probably decrease membrane-bound expression of IL7R. As this risk allele is common in the general population, some additional triggers are probably required for the development and progression of MS.

配列類似性

Belongs to the type I cytokine receptor family. Type 4 subfamily.
Contains 1 fibronectin type-III domain.

ドメイン

The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.
The box 1 motif is required for JAK interaction and/or activation.

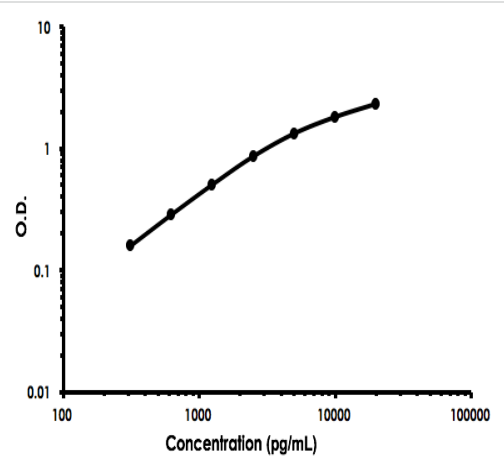
翻訳後修飾

N-glycosylated IL-7Ralpha binds IL7 300-fold more tightly than the unglycosylated form.

細胞内局在

Secreted and Cell membrane.

画像



Human IL17R ELISA Kit (ab213799) Standard Curve

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