ARG83800
arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE)

Package: 96 wells
Store at: 4°C, -20°C, -80°C

Summary

Product Description	ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) is an Enzyme Immunoassay kit for the quantification of Human Allergy in serum and plasma. See all Multiplex ELISA kits
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Allergy
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	IL4: 7.81 pg/mL IL5: 15.625 pg/mL IL13: 31.25 pg/mL IgE: 781.25 pg/mL
Sample Type	Serum and plasma
Standard Range	IL4: 15.625-500 pg/mL IL5: 31.25-1000 pg/mL IL13: 62.5-2000 pg/mL IgE: 1562.5-50000 pg/mL
Sample Volume	50 µL

Application Instructions

Assay Time	4 hours

Properties

Form	96 well
Storage instruction	Store the kit at 4°C, -20°C, -80°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	IL4; IL5; IL13; IgE
Gene Full Name	Interleukin 4; Interleukin 5; Interleukin 13; Immunoglobulin E
Background	IL4:The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and

activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. IL4 is considered an important cytokine for tissue repair, counterbalancing the effects of proinflammatory type 1 cytokines, however, it also promotes allergic airway inflammation. Moreover, IL-4, a type 2 cytokine, mediates and regulates a variety of human host responses such as allergic, anti-parasitic, wound healing, and acute inflammation. This cytokine has been reported to promote resolution of neutrophil-mediated acute lung injury. In an allergic response, IL-4 has an essential role in the production of allergen-specific immunoglobin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Aug 2020]

IL5:This gene encodes a cytokine that acts as a growth and differentiation factor for both B cells and eosinophils. The encoded cytokine plays a major role in the regulation of eosinophil formation, maturation, recruitment and survival. The increased production of this cytokine may be related to pathogenesis of eosinophil-dependent inflammatory diseases. This cytokine functions by binding to its receptor, which is a heterodimer, whose beta subunit is shared with the receptors for interleukine 3 (IL3) and colony stimulating factor 2 (CSF2/GM-CSF). This gene is located on chromosome 5 within a cytokine gene cluster which includes interleukin 4 (IL4), interleukin 13 (IL13), and CSF2 . This gene, IL4, and IL13 may be regulated coordinately by long-range regulatory elements spread over 120 kilobases on chromosome 5q31. [provided by RefSeq, Jul 2013]

IL13:This gene encodes an immunoregulatory cytokine produced primarily by activated Th2 cells. This cytokine is involved in several stages of B-cell maturation and differentiation. It up-regulates CD23 and MHC class II expression, and promotes IgE isotype switching of B cells. This cytokine down-regulates macrophage activity, thereby inhibits the production of pro-inflammatory cytokines and chemokines. This cytokine is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL3, IL5, IL4, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL4. [provided by RefSeq, Jul 2008]

IgE:Enables immunoglobulin receptor binding activity. Involved in several processes, including B cell mediated immunity; Fc receptor-mediated immune complex endocytosis; and leukocyte degranulation. Located in extracellular space and plasma membrane. Part of IgE B cell receptor complex. [provided by Alliance of Genome Resources, Jun 2025]

Function

IL4:The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. IL4 is considered an important cytokine for tissue repair, counterbalancing the effects of proinflammatory type 1 cytokines, however, it also promotes allergic airway inflammation. Moreover, IL-4, a type 2 cytokine, mediates and regulates a variety of human host responses such as allergic, anti-parasitic, wound healing, and acute inflammation. This cytokine has been reported to promote resolution of neutrophil-mediated acute lung injury. In an allergic response, IL-4 has an essential role in the production of allergen-specific immunoglobin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Aug 2020]

IL5:This gene encodes a cytokine that acts as a growth and differentiation factor for both B cells and eosinophils. The encoded cytokine plays a major role in the regulation of eosinophil formation, maturation, recruitment and survival. The increased production of this cytokine may be related to pathogenesis of eosinophil-dependent inflammatory diseases. This cytokine functions by binding to its receptor, which is a heterodimer, whose beta subunit is shared with the receptors for interleukine 3 (IL3) and colony stimulating factor 2 (CSF2/GM-CSF). This gene is located on chromosome 5 within a cytokine gene cluster which includes interleukin 4 (IL4), interleukin 13 (IL13), and CSF2 . This gene, IL4, and IL13 may be regulated coordinately by long-range regulatory elements spread over 120 kilobases on chromosome 5q31. [provided by RefSeq, Jul 2013]

IL13:This gene encodes an immunoregulatory cytokine produced primarily by activated Th2 cells. This

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IgE:Enables immunoglobulin receptor binding activity. Involved in several processes, including B cell mediated immunity; Fc receptor-mediated immune complex endocytosis; and leukocyte degranulation. Located in extracellular space and plasma membrane. Part of IgE B cell receptor complex. [provided by Alliance of Genome Resources, Jun 2025]

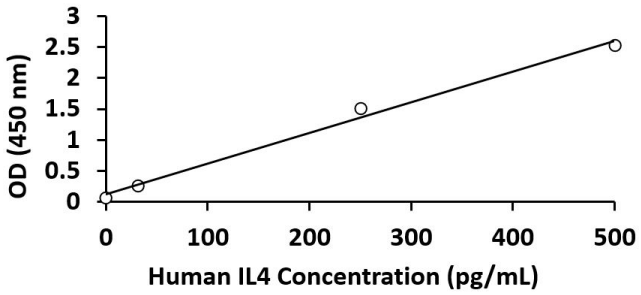
Highlight

Related Product:
anti-IL4 antibody;
anti-IL5 antibody;
anti-IL13 antibody;
anti-IgE antibody;

Images

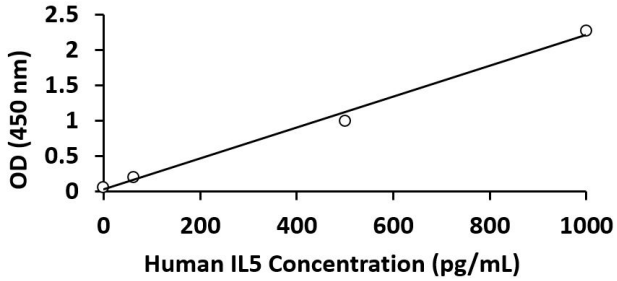
	1	2	3	4	5	6	7	8	9	10	11	12
A	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4
B	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5
C	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13
D	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE
E	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4	IL4
F	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5	IL5
G	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13	IL13
H	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE	IgE

Antibodies Coating Pattern In Microtiter Plate of ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE)



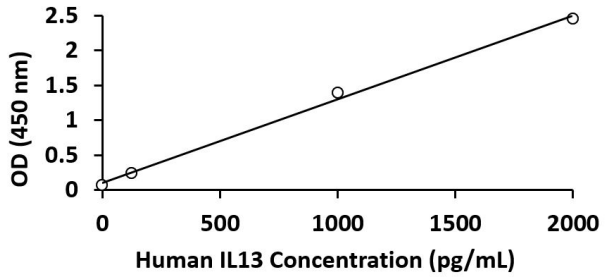
ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) standard curve image

ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) results of a typical standard for Human IL4 run with optical density reading at 450 nm.



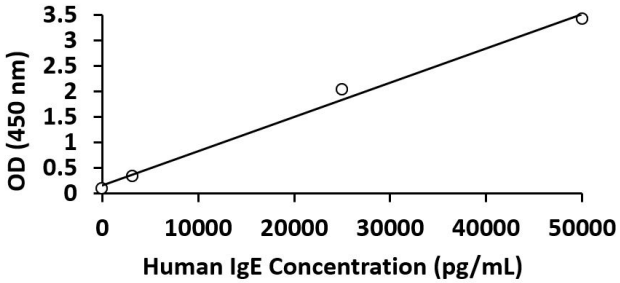
ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) standard curve image

ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) results of a typical standard for Human IL5 run with optical density reading at 450 nm.



ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) standard curve image

ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) results of a typical standard for Human IL13 run with optical density reading at 450 nm.



ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) standard curve image

ARG83800 arigoPLEX® Human Allergy Multiplex ELISA Kit (IL4, IL5, IL13, IgE) results of a typical standard for Human IgE run with optical density reading at 450 nm.