

## ARG82570 Mouse CD124 / IL4 Receptor ELISA Kit

Package: 96 wells  
Store at: 4°C

### Component

| Cat. No.     | Component Name                        | Package              | Temp                                                                |
|--------------|---------------------------------------|----------------------|---------------------------------------------------------------------|
| ARG82570-001 | Antibody-coated microplate            | 8 X 12 strips        | 4°C. Unused strips should be sealed tightly in the air-tight pouch. |
| ARG82570-002 | Standard                              | 2 X 10 ng/vial       | 4°C                                                                 |
| ARG82570-003 | Standard/Sample diluent               | 30 ml (Ready to use) | 4°C                                                                 |
| ARG82570-004 | Antibody conjugate concentrate (100X) | 1 vial (100 µl)      | 4°C                                                                 |
| ARG82570-005 | Antibody diluent buffer               | 12 ml (Ready to use) | 4°C                                                                 |
| ARG82570-006 | HRP-Streptavidin concentrate (100X)   | 1 vial (100 µl)      | 4°C                                                                 |
| ARG82570-007 | HRP-Streptavidin diluent buffer       | 12 ml (Ready to use) | 4°C                                                                 |
| ARG82570-008 | 25X Wash buffer                       | 20 ml                | 4°C                                                                 |
| ARG82570-009 | TMB substrate                         | 10 ml (Ready to use) | 4°C (Protect from light)                                            |
| ARG82570-010 | STOP solution                         | 10 ml (Ready to use) | 4°C                                                                 |
| ARG82570-011 | Plate sealer                          | 4 strips             | Room temperature                                                    |

### Summary

|                     |                                                                                                                                                                                                          |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description | ARG82570 Mouse CD124 / IL4 Receptor ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse CD124 / IL4 Receptor in serum, plasma (EDTA, heparin, citrate) and cell culture supernatants. |
| Tested Reactivity   | Ms                                                                                                                                                                                                       |
| Tested Application  | ELISA                                                                                                                                                                                                    |
| Target Name         | CD124 / IL4 Receptor                                                                                                                                                                                     |
| Conjugation         | HRP                                                                                                                                                                                                      |
| Conjugation Note    | Substrate: TMB and read at 450 nm.                                                                                                                                                                       |
| Sensitivity         | 78 pg/ml                                                                                                                                                                                                 |
| Sample Type         | Serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.                                                                                                                                    |
| Standard Range      | 156 - 10000 pg/ml                                                                                                                                                                                        |
| Sample Volume       | 100 µl                                                                                                                                                                                                   |
| Precision           | Intra-Assay CV: 5.3%<br>Inter-Assay CV: 6.8%                                                                                                                                                             |

|                 |                                                                                                                                                                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternate Names | CD124; IL-4RA; IL-4R subunit alpha; Soluble IL-4R-alpha; IL-4 receptor subunit alpha; IL4RA; CD antigen CD124; sIL4Ralpha/prot; Soluble IL-4 receptor subunit alpha; IL-4R-alpha; IL-4-binding protein; IL4-BP; Interleukin-4 receptor subunit alpha |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Application Instructions

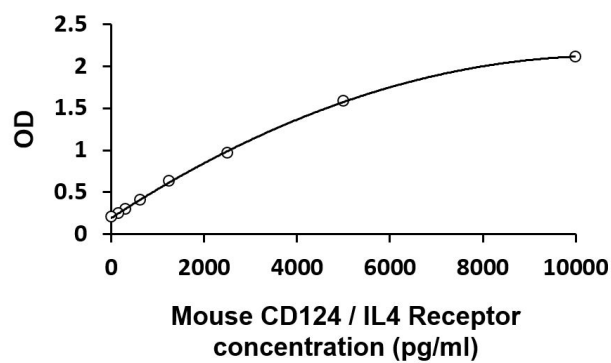
|            |           |
|------------|-----------|
| Assay Time | ~ 5 hours |
|------------|-----------|

## Properties

|                     |                                                                                                                                                                                                                                                          |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form                | 96 well                                                                                                                                                                                                                                                  |
| Storage instruction | Store the kit at 2-8°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           | IL4R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Gene Full Name        | interleukin 4 receptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Background            | This gene encodes the alpha chain of the interleukin-4 receptor, a type I transmembrane protein that can bind interleukin 4 and interleukin 13 to regulate IgE production. The encoded protein also can bind interleukin 4 to promote differentiation of Th2 cells. A soluble form of the encoded protein can be produced by proteolysis of the membrane-bound protein, and this soluble form can inhibit IL4-mediated cell proliferation and IL5 upregulation by T-cells. Allelic variations in this gene have been associated with atopy, a condition that can manifest itself as allergic rhinitis, sinusitis, asthma, or eczema. Polymorphisms in this gene are also associated with resistance to human immunodeficiency virus type-1 infection. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Apr 2012] |
| Function              | Receptor for both interleukin 4 and interleukin 13. Couples to the JAK1/2/3-STAT6 pathway. The IL4 response is involved in promoting Th2 differentiation. The IL4/IL13 responses are involved in regulating IgE production and, chemokine and mucus production at sites of allergic inflammation. In certain cell types, can signal through activation of insulin receptor substrates, IRS1/IRS2.<br><br>Soluble IL4R (sIL4R) inhibits IL4-mediated cell proliferation and IL5 up-regulation by T-cells. [UniProt]                                                                                                                                                                                                                                                                                                                               |
| Highlight             | Related products:<br><a href="#">CD124 ELISA Kits</a> :<br>New ELISA data calculation tool:<br><a href="#">Simplify the ELISA analysis by GainData</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| PTM                   | On IL4 binding, phosphorylated on C-terminal tyrosine residues. Phosphorylation on any one of tyrosine residues, Tyr-575, Tyr-603 or Tyr-631, is required for STAT6-induced gene induction.<br><br>The soluble form (sIL4R/IL4BP) can also be produced by proteolytic cleavage at the cell surface (shedding) by a metalloproteinase. [UniProt]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cellular Localization | Cell membrane; Single-pass type I membrane protein. Isoform 2: Secreted. [UniProt]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



ARG82570 Mouse CD124 / IL4 Receptor ELISA Kit standard curve image

ARG82570 Mouse CD124 / IL4 Receptor ELISA Kit results of a typical standard run with optical density reading at 450 nm.