

# Product datasheet

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# ARG80228 Mouse IL33 ELISA Kit

Package: 96 wells Store at: 4°C

# Component

| Cat. No.     | Component Name                  | Package       | Temp  |
|--------------|---------------------------------|---------------|---|
| ARG80228-001 | Antibody-coated microplate      | 8 X 12 strips | 4°C. Unused strips should be sealed tightly in the air-tight pouch. |
| ARG80228-002 | Standard<br>(Lyophilized)       | 2 X 3 ng/vial | 4°C   |
| ARG80228-003 | Standard diluent buffer         | 20 ml         | 4°C   |
| ARG80228-004 | Antibody conjugate concentrate  | 400 μΙ        | 4°C   |
| ARG80228-005 | Antibody diluent buffer         | 16 ml         | 4°C   |
| ARG80228-006 | HRP-Streptavidin concentrate    | 400 μΙ        | 4°C (Protect from light)  |
| ARG80228-007 | HRP-Streptavidin diluent buffer | 16 ml         | 4°C   |
| ARG80228-008 | 20X Wash buffer                 | 50 ml         | 4°C   |
| ARG80228-009 | TMB substrate                   | 12ml          | 4°C (Protect from light)  |
| ARG80228-010 | STOP solution                   | 12ml          | 4°C   |
| ARG80228-011 | Plate sealer                    | 4 strips      | Room temperature  |
|              |                                 |               |   |

## Summary

| Product Description                                  | ARG80228 Mouse IL33 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse IL33 in Serum, Plasma, Cell culture supernatants. |
|--|--|
| Tested Reactivity                                    | Ms   |
| Tested Application                                   | ELISA  |
| Specificity  | No significant cross-reactivity or interference with Mouse Pro-IL-33 (aa 1-108), ST2/IL-1 R4/Fc Chimera                                      |
| Target Name  | IL33   |
| Conjugation  | HRP  |
| Conjugation Note                                     | Substrate: TMB and read at 450 nm  |
| Sensitivity  | 24 pg/ml   |
| Sample Type Serum, Plasma, Cell culture supernatants |  |
| Standard Range                                       | 46.875 - 3000 pg/ml  |
| Sample Volume  | 100 μΙ   |

Precision CV: less than 10%

Alternate Names 95-270; NF-HEV; Interleukin-33; C9orf26; IL1F11; 99-270; Interleukin-1 family member 11; IL-33;

IL-1F11; Nuclear factor from high endothelial venules; NFEHEV; DVS27; 109-270

#### **Application Instructions**

Assay Time

4 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

Database links

GeneID: 77125 Mouse

Swiss-port # Q8BVZ5 Mouse

Gene Symbol

1133

Gene Full Name

interleukin 33

 ${\sf Background}$ 

Interleukin-33 (IL-33) is a recently identified member of the IL-1 family of cytokines whose other members include IL-1alphabeta, IL-1Ra and IL-18. Its receptor has been shown to be ST2, an IL-1 receptor family member that also acts as a negative regulator of TLR-IL-1R signaling and IL-1R accessory protein (IL-1RAcP). Receptor binding of IL-33 activates NF-kappaB and MAP kinases and induces the expression of TH2-associated cytokines such as IL-4, IL-5 and IL-6. Prolonged IL-33 treatment of mice led to the development of eosinophilia, splenomegaly, and severe pathological changes in mucosal organs such as lungs, esophagus and small intestine. Recent experiments have shown that IL-33 can also colocalize with heterochromatin and possesses transcriptional repressor activities, indicating that IL-33 may function as both a proinflammatory cytokine and an intracellular nuclear factor with transcriptional regulatory properties. Despite its predicted molecular weight, IL-33 will often run at higher molecular weight in SDS-PAGE.

Highlight

Related products:

<u>IL33 antibodies;</u> <u>IL33 ELISA Kits;</u> <u>IL33 recombinant proteins;</u>

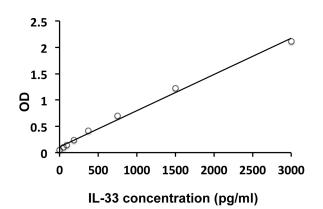
New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Research Area

Cell Biology and Cellular Response kit; Immune System kit

PTM

The full length protein can be released from cells and is able to signal via the IL1RL1/ST2 receptor. However, proteolytic processing by CSTG/cathepsin G and ELANE/neutrophil elastase produces C-terminal peptides that are more active than the unprocessed full length protein. May also be proteolytically processed by calpains (PubMed:19596270). Proteolytic cleavage mediated by apoptotic caspases including CASP3 and CASP7 results in IL33 inactivation (PubMed:19559631). In vitro proteolytic cleavage by CASP1 was reported (PubMed:16286016) but could not be confirmed in vivo (PubMed:19465481) suggesting that IL33 is probably not a direct substrate for that caspase.



## ARG80228 Mouse IL33 ELISA Kit standard curve image

ARG80228 Mouse IL33 ELISA Kit results of a typical standard run with optical density reading at 450 nm.