

## Product Datasheet

### Recombinant Human IL1a (orb1921822)

**Description**

The interleukin (IL)-1 family member IL-1 is a ubiquitous and pivotal pro-inflammatory cytokine. IL-1 is constitutively expressed in epithelial, endothelial and stromal cells and can be upregulated in hematopoietic and non-hematopoietic cells by a number of stimuli, including TLR agonists, inflammatory cytokines, oxidative stress. IL-1 is translated into a 31-kDa precursor form (pro-IL-1). The pro-IL-1 could be cleaved by several protease to a 17-kDa mature form and a 16-kDa N terminal form. The mature form of IL-1 has higher biology activity compared to the pro-IL-1 as its binding affinity to its receptor is several folds higher than the pro-IL-1. IL-1 is a unique cytokine which could localize in the cytosol, membrane, nucleus, as well as being secreted out of the cell. IL-1 signaling pathway is triggered after binding of IL-1 to the IL-1RI. IL-1RI is found on the surface of various types of cells and, both IL-1 and IL-1 act on this same receptor. Binding of IL-1 to its receptor leads to dimerization of the receptor at the TIR domain and recruitment of IL-1R accessory protein, IL-1RAcP. This complex then recruits other adaptor protein, MyD88 and IRAK4. Formation of MyD88 and IRAK4 complex is a critical mediator in IL-1 signaling cascades.

**Endotoxins**

≤10 EU/mg

**Form/Appearance**

Lyophilized Powder

**Storage**

Use a manual defrost freezer and avoid repeated freeze - thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 6 months, -20 to -70°C under sterile conditions after reconstitution.

**Note**

For research use only

**Application notes**

Application Notes: For research use only. Minimum Sample Size: 50µg/vial

**Purity**

≥95%

**Source**

CHO Cell

**MW**

18 kDa

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<b>Uniprot ID</b>	<b>P01583</b>
<b>Entrez</b>	<b>3552</b>
<b>Expiration Date</b>	6 months from date of receipt.

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**Biorbyt Ltd.**

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