

## Product Datasheet

### RecombinantIL-1 $\beta$ , Porcine (orb1494827)

|                          |   |
|--------------------------|---|
| <b>Description</b>       | Interleukin-1 beta (rpIL-1 $\beta$ ) is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. IL-1 $\alpha$ and IL-1 $\beta$ are structurally related polypeptides that share approximately 27% amino acid (aa) identity in porcine. While IL-1 $\alpha$ and IL-1 $\beta$ are regulated independently, they bind to the same receptor and exert identical biological effects. IL-1 $\beta$ stimulates thymocyte proliferation by inducing il-2 release, b-cell maturation and proliferation, and fibroblast growth factor activity. Recombinant Porcine IL-1 $\beta$ produced in E.coli is a single non-glycosylated polypeptide chain containing 154 amino acids. A fully biologically active molecule, rpIL-1 $\beta$ has a molecular mass of 17.7 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript. |
| <b>Endotoxins</b>        | < 0.2 EU/ $\mu$ g, determined by LAL method.  |
| <b>Preservatives</b>     | Lyophilized after extensive dialysis against PBS.   |
| <b>Form/Appearance</b>   | Lyophilized after extensive dialysis against PBS.   |
| <b>Storage</b>           | Lyophilized recombinant Porcine IL-1 $\beta$ , remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, Porcine IL-1 $\beta$ should be stable up to 1 week at 4°C or up to 3 months at -20°C.  |
| <b>Note</b>              | For research use only   |
| <b>Application notes</b> | Reconstituted in ddH <sub>2</sub> O or PBS at 100 $\mu$ g/ml.   |
| <b>Protein Sequence</b>  | MANVQSMEC KLQDKDHSKSL VLAGPHMLKA LHLLTGDLKR EVVFCMSFVQ<br>GDDSNNKIPV TLGIKGNLY LSCVMKDNTPLQLLEDIDPK RYPKRDMEMR FVFYKTEIKN<br>RVEFESALYP NWYISTSQAE QKPVFLGNSK GRQDITDFTM EVLSP  |
| <b>Purity</b>            | > 95% as analyzed by SDS-PAGE.  |
| <b>Source</b>            | Escherichia coli.   |
| <b>MW</b>                | 17.7 kDa, observed by reducing SDS-PAGE.  |
| <b>Expiration Date</b>   | 6 months from date of receipt.  |

#### Biorbyt Ltd.

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+441223859353) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

#### Biorbyt LLC.

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+14159065211) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)