

Recombinant Porcine Interleukin-1 beta

#R00346

Size: 10 µg/100 µg/500 µg

Stability & 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.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interleukin-1 beta (IL-1β) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1α and IL-1β binds to the same receptor and has similar but not identical biological properties. Recombinant porcine interleukin-1 beta is a 17 kDa protein containing 153 amino acid residues and it shares 63 % - 70 % a.a. sequence identity with canine, cotton rat, equine, feline, human, mouse, rat, and rhesus IL1β.

AA Sequence

ANVQSMECKLQDKDHKSLVLAGPHMLKALHLLTGDL
KREVVFCMSFVQGDDSNKIPVTLGIKGKNLYLSCVM
KDNTPTLQLEDIDPKRYPKRDMEKRFVFKTEIKNRV

EFESALYPNWIYSTSQAEQKPVFLGNSKGRQDITDFT
MEVLSP

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	IL-1 beta
Accession	P26889
GeneID	397122
Species	Porcine
Source	Escherichia coli.
Molecular Weight	Approximately17.6 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine D10S cells is less than 5.0 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁵

	IU/mg.
Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 3 % trehalose.
Endotoxin	Less than 1 EU/µg of rPolL-1β as determined by LAL method.