

## **Product datasheet for PH302079**

## OriGene Technologies, Inc.

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## IL1 beta (IL1B) (NM 000576) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** IL1B MS Standard C13 and N15-labeled recombinant protein (NP\_000567)

Species: Human **HEK293 Expression Host:** 

**Expression cDNA Clone** 

or AA Sequence:

RC202079

Predicted MW: 30.7 kDa

>RC202079 protein sequence **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MAEVPELASEMMAYYSGNEDDLFFEADGPKQMKCSFQDLDLCPLDGGIQLRISDHHYSKGFRQAASVVVA MDKLRKMLVPCPQTFQENDLSTFFPFIFEEEPIFFDTWDNEAYVHDAPVRSLNCTLRDSQQKSLVMSGPY ELKALHLQGQDMEQQVVFSMSFVQGEESNDKIPVALGLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKK

MEKRFVFNKIEINNKLEFESAQFPNWYISTSQAENMPVFLGGTKGGQDITDFTMQFVSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Labeling Method:** Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 000567

RefSeq Size: 1498 RefSeq ORF: 807

Synonyms: IL-1; IL1-BETA; IL1beta; IL1F2

Locus ID: 3553 UniProt ID: P01584





Cytogenetics:

2q14.1

Summary:

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq, Jul 2020]

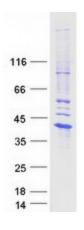
**Protein Families:** 

Druggable Genome, Secreted Protein

**Protein Pathways:** 

Alzheimer's disease, Apoptosis, Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing pathway, Graft-versus-host disease, Hematopoietic cell lineage, MAPK signaling pathway, NOD-like receptor signaling pathway, Prion diseases, Toll-like receptor signaling pathway, Type I diabetes mellitus

## **Product images:**



Coomassie blue staining of purified IL1B protein (Cat# [TP302079]). The protein was produced from HEK293T cells transfected with IL1B cDNA clone (Cat# [RC202079]) using MegaTran 2.0 (Cat# [TT210002]).