

## Product datasheet for TP728227M

#### OriGene Technologies, Inc.

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### Recombinant IFN beta 1a (Interferon beta 1a), Human

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant IFN beta 1a (Interferon beta 1a), Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MSYNLLGFLQRSSNFQCQKLLWQLNGRLEYCLKDRMNFDIPEEIKQLQQFQKEDAALTIYEMLQNIFAIFR QDSSSTGWNETIVENLLANVYHQINHLKTVLEEKLEKEDFTRGKLMSSLHLKRYYGRILHYLKAKEYSHCA

WTIVRVEILRNFYFINRLTGYLRN with polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 20.84 kDa. The protein migrates as 15 kDa under

reducing condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 8.0.

**Bioactivity:** Measure by its ability to induce apoptosis in HeLa cells. The ED $_{50}$  for this effect is <15 ng/mL.

Measure by its ability to induce cytotoxicity in TF-1 cells. The ED<sub>50</sub> for this effect is <0.1 ng/mL. The specific activity of recombinant human IFN beta 1a is approximately >1  $\times$ 107 IU/ mg.

**Endotoxin:** <0.1 EU per 1 μg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu$ g/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P01574

Synonyms: IFNB1, Type I Interferon

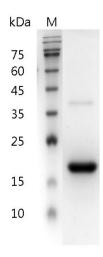




#### **Summary:**

Interferon-Beta 1a (IFN-beta 1a) is a leukocyte interferon, which is a variant of Interferon-beta. IFN-beta 1a is a 19 kDa protein containing 166 amino acid residues. It could bind the interferon receptors that activates the signal transduction of immune responses through the Jak/STAT pathway in leukocytes and lymphoblastoid cells.

# **Product images:**



SDS- PAGE analysis of recombinant human IFN beta 1a