pbl assay science
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Certificate of Analysis

Human Interferon Alpha 1 (Alpha D)

Catalog No: 11175-1
Lot No:
Size: Ó1 x 10^5 units/vial

Description: Recombinant Human Interferon Alpha 1 (Alpha D) (Hu-IFN-Ŭ1; Hu-[Ala^{114}] IFN-ŬD)
Volume: 0.1 ml
Activity: x 10 units/ml (MDBK/VSV)
Specific Activity: x 10 units/mg (MDBK/VSV)
Buffer: Phosphate buffered saline (PBS) containing 0.1% bovine serum albumin (BSA)
Endotoxin: < 1 EU/ε g
Molecular Weight: 19.4 kDa
Purity: Ó95%
Purification Method: Purified from *E. coli* by a combination of ion exchange, hydrophobic interaction and size exclusion chromatography
Source: cDNA obtained from human leukocyte mRNA expressed in *E. coli*
Human Gene: IFNA1
Synonyms: Hu-[Ala^{114}] IFN-ŬD
Accession #: J00210

Assay Used to Measure Bioactivity: Interferon was titrated with the use of the cytopathic effect inhibition assay as listed

Bovine (MDBK/VSV) ï performed as described [Rubinstein, *et al*. (1981) *J. Virol*. 37(2):755]. The EC_{50} for interferon in this assay is ~5 U/ml. Lot Activity was derived from multiple determinations in the above assay.

Human (A549/EMCV) ï performed as described [Budd, *et al.* (1985) *Canc. Chem. Pharm.* 12:39]. The EC_{50} for interferon in this assay is ~1 U/ml. **Activity:** x 10 units/ml **Specific Activity:** x 10 units/mg

The units are determined by use of a Human IFN Alpha A (Hu-IFN-ŬA [2a]) laboratory standard calibrated to the international reference standard for Human Interferon Alpha A (Hu-IFN-ŬA [2a]) provided by the National Institutes of Health [Meager, *et al* (2001). *J. Immunol. Meth*. 257(1-2):17-33]. Please note that IFN assays vary between labs and assay systems [Meager, *et al.* (2001) *J. Immunol. Meth.* 257:17. Meager and Das (2005) *J. Immunol. Meth.* 306:1].

Shipping Conditions: Dry Ice
Physical State of Product During Shipping: Frozen
Storage Conditions/Comments: After receipt, the product may be stored at -20°C for short-term use (Ò6 months). For long-term storage, we recommend storing the product at -70°C or below for retention of full activity. When thawing, the contents of the tube should be apportioned in separate tubes so that freezing and thawing is kept to a minimum. Refreezing should be done on dry ice or in a dry ice/alcohol bath. Further dilution of the product should be in buffers containing protein such as 0.1% bovine serum albumin (BSA) or tissue culture media with serum. Dilution of material below 2 x 10^5 units/ml for freezing is not recommended. One freeze-thaw cycle is equivalent to thawing an aliquot prepared from the material received. [The activity measured after one freeze-thaw cycle is x 10 units/ml (MDBK/VSV)]. For more information on protein handling, visit our Resource Library at www.pblassaysci.com.

Authorization

Released by: _____ Date:

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