



## Interferon Regulatory Factor-3, human recombinant (rHuIRF-3)

**Catalog No:** 94920  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** IRF-3, IRF3, Interferon Regulatory Factor 3

### Background

Members of the Interferon regulatory factor (IRF) family regulate gene expression critical to immune response, hemopoiesis, and proliferation. IRF-3 is a member of the IRF family, and is distinct from other family members. Its transcriptional activity is regulated solely by posttranslational modifications. It plays a crucial role in activation of innate immunity and inflammation in response to viral infection. IRF-3 mediates interferon-stimulated response element (isre) promoter activation. Functions as a molecular switch for antiviral activity. Dsrna generated during the course of a viral infection leads to IRF3 phosphorylation on the c-terminal serine/threonine cluster. This induces a conformational change, leading to its dimerization, nuclear localization and association with creb binding protein (crebbp) to form dsrna-activated factor 1 (draf1), a complex which activates the transcription of genes under the control of isre. The complex binds to the ie and prdiii regions on the ifn-alpha and ifn-beta promoters respectively. IRF-3 does not have any transcription activation domains.

### Description

Interferon Regulatory Factor-3 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 111 amino acids (1-112) and having a molecular mass of 13 kDa. IRF-3 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered colorless solution.

### Formulation

1 mg/ml in phosphate buffered saline (PBS), pH 7.4.

### Stability

Liquid Interferon, although stable at 10°C for 1 week, should be stored below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

### Amino Acid Sequence

MGTPKPRILP WLVSQDLGLGQ LEGVAWVNKS RTRFRIPWKH GLRQDAQQED FGIFQAWAEA TGAYVPGRDK PDLPTWKRNF  
RSALNRKEGL RLAEDRSKDP HDPHKIYEFV NS

### Usage

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**

**CONTACT US TODAY**

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51