

Datasheet: PAP004

**BATCH NUMBER 168300**

<b>Description:</b>	RECOMBINANT CHICKEN INTERFERON ALPHA
<b>Name:</b>	IFN ALPHA
<b>Other names:</b>	INTERFERON ALPHA
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	50 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
ELISA			▪	
Functional Assays	▪			

Where this protein has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Chicken
<b>Product Form</b>	Purified recombinant protein expressed in <i>E.coli</i> - liquid.
<b>Preparation</b>	Recombinant protein prepared from <i>E.coli</i>
<b>Source</b>	E.coli
<b>Buffer Solution</b>	0.05M Sodium Acetate 1M Sodium Chloride 0.01M Tris-HCl 2M Urea 10mM Beta-Mercaptoethanol
<b>Preservative Stabilisers</b>	None present
<b>Approx. Protein</b>	Total protein concentration 1.0 mg/ml

## Concentrations

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### External Database Links

#### UniProt:

[P42165](#)    [Related reagents](#)

#### Entrez Gene:

[396398](#)    IFNA3    [Related reagents](#)

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### Product Information

**Recombinant Chicken interferon alpha** (IFN alpha) shares structural and biological properties with mammalian IFN1. Recombinant chicken IFN alpha (rChIFNa) has been shown to act as a highly potent anti-viral agent *in vitro* ([Schultz, U. et al. 1995](#)). rChIFNa also resulted in a noticeable delay in the progression of tumors in CC progressor chickens infected with Rous Sarcoma Virus, when administered intravenously ([Plachy, J. et al. 1999](#)).

Recombinant chicken interferon alpha is the immunogen used to produce the polyclonal Rabbit anti Chicken [interferon alpha antibody](#).

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### Protein Molecular Weight

19 kD

### Activity

1x10<sup>7</sup>units/mg

### Purity

>85% by Ni chelate chromatography

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### References

- Schultz, U. *et al.* (1995) Recombinant chicken interferon: a potent antiviral agent that lacks intrinsic macrophage activating factor activity. [Eur J Immunol. 25 \(3\): 847-51.](#)
  - Schultz, U. *et al.* (1995) Recombinant chicken interferon from *Escherichia coli* and transfected COS cells is biologically active. [Eur J Biochem. 229 \(1\): 73-6.](#)
  - Plachy, J. *et al.* (1999) Protective effects of Type I and Type II interferons toward Rous Sarcoma Virus-induced tumors in chickens. [Virology. 256: 85-91.](#)
  - Alamares, J.G. *et al.* (2010) The interferon antagonistic activities of the V proteins from two strains of Newcastle disease virus correlate with their known virulence properties. [Virus Res. 147 \(1\): 153-7.](#)
  - Jiang, H. *et al.* (2011) Chicken interferon alpha pretreatment reduces virus replication of pandemic H1N1 and H5N9 avian influenza viruses in lung cell cultures from different avian species. [Virol J. 8: 447.](#)
  - Smith, S.E. *et al.* (2013) Chicken interferon-inducible transmembrane protein 3 restricts influenza viruses and lyssa viruses *in vitro*. [J Virol. 87 \(23\): 12957-66.](#)
  - Lostalé-seijo, I. *et al.* (2016) Interferon induction by avian reovirus. [Virology. 487: 104-11.](#)
  - Lostalé-seijo, I. *et al.* (2016) Response of Three Different Viruses to Interferon Priming and Dithiothreitol Treatment of Avian Cells. [J Virol. 90 \(18\): 8328-40.](#)
  - Deng, L. *et al.* (2016) Characterization and functional studies of fowl adenovirus 9 dUTPase. [Virology. 497: 251-61.](#)
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### Further Reading

- Schwarz, H. *et al.* (2004) Synthesis of IFN-beta by virus-infected chicken embryo cells

demonstrated with specific antisera and a new bioassay. [J Interferon Cytokine Res. 24 \(3\): 179-84.](#)

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**Storage** Store at -20°C only.  
Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein.  
This product should be stored undiluted.  
Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 3 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20481 available at:  
<https://www.bio-rad-antibodies.com/SDS/PAP004>  
20481

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**Regulatory** For research purposes only

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