

Datasheet: PAP004

Description:	RECOMBINANT CHICKEN INTERFERON ALPHA		
Name:	IFN ALPHA		
Other names:	INTERFERON ALPHA		
Format:	Rec. Protein		
Product Type:	Recombinant Protein		
Quantity:	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.

	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.

Target Species	Chicken
Product Form	Purified recombinant protein expressed in <i>E.coli</i> - liquid.
Preparation	Recombinant protein prepared from <i>E.coli</i>
Source	E.coli
Buffer Solution	0.05M Sodium Acetate1M Sodium Chloride0.01M Tris-HCI2M Urea10mM Beta-Mercaptoethanol
Preservative Stabilisers	None present
Approx. Protein Concentrations	Total protein concentration 1.0 mg/ml

External Database Links

UniProt:

P42165 Related reagents

Entrez Gene:

396398 IFNA3 Related reagents

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.

Protein Molecular Weight

19 kD

Activity

1x10⁷units/mg

Purity

>85% by Ni chelate chromatography

References

- 1. Schultz, U. *et al.* (1995) Recombinant chicken interferon: a potent antiviral agent that lacks intrinsic macrophage activating factor activity. <u>Eur J Immunol. 25 (3): 847-51.</u>
- 2. Schultz, U. *et al.* (1995) Recombinant chicken interferon from *Escherichia coli* and transfected COS cells is biologically active. <u>Eur J Biochem. 229 (1): 73-6.</u>
- 3. Plachy, J. *et al.* (1999) Protective effects of Type I and Type II interferons toward Rous Sarcoma Virus-induced tumors in chickens. <u>Virology. 256: 85-91.</u>
- 4. 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. <u>Virus Res. 147 (1): 153-7.</u>
- 5. 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. <u>Virol J. 8: 447.</u>
- 6. Smith, S.E. *et al.* (2013) Chicken interferon-inducible transmembrane protein 3 restricts influenza viruses and lyssa viruses *in vitro*. <u>J Virol. 87 (23): 12957-66.</u>
- 7. Lostalé-seijo, I. *et al.* (2016) Interferon induction by avian reovirus. <u>Virology. 487:</u> 104-11.
- 8. Lostalé-seijo, I. *et al.* (2016) Response of Three Different Viruses to Interferon Priming and Dithiothreitol Treatment of Avian Cells. <u>J Virol. 90 (18): 8328-40.</u>
- 9. Deng, L. *et al.* (2016) Characterization and functional studies of fowl adenovirus 9 dUTPase. Virology. 497: 251-61.

Further Reading

1. Schwarz, H. *et al.* (2004) Synthesis of IFN-beta by virus-infected chicken embryo cells demonstrated with specific antisera and a new bioassay. <u>J Interferon Cytokine Res. 24 (3): 179-84.</u>

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.
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #20481 available at:
Information	https://www.bio-rad-antibodies.com/SDS/PAP004
	20481
Regulatory	For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M433680:241118'

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