

---

## Product Data Sheet

---

Product Name: Cy5 OVA mRNA (5'CAP)

Cat. No.: GM10023

### Chemical Properties

Purity	>98%	Extinction Coefficient	
Formula		M.Wt	
Salt Form		Concentration	1mg/mL
Buffer	1 mM Sodium Citrate, pH 6.4	Storage	-40°C or below
Synonyms		Backbone	
Base Analog		Sugar Type	
Nucleotide Category			

### Background

Cy5 OVA mRNA (5'CAP) is produced through in vitro transcription, which simulates the mRNA processing process in eukaryotes. It has a 5' end Cap 1 cap structure, a 3' end poly (A) tail, and Cy5-UTP modification (Cy5-UTP: UTP=3:1 (molar ratio)), increasing the stability and translation efficiency of mRNA<sup>[1]</sup>. Cy5 is a commonly used cyanine fluorescent dye with maximum excitation/emission wavelengths of 650/670nm, capable of real-time monitoring of the transfection, localization, and expression of target proteins in cells.

Ovalbumin (OVA) is a member of the chromoprotein superfamily and the main protein component in egg white. OVA is a glycoprotein with a molecular weight of approximately 45000 daltons that can induce moderate immunity in the body and is a commonly used antigen in immune and biochemical research. Egg white protein is often used as an immunogen for immune experiments, such as establishing animal models of high altitude sickness, asthma, etc. OVA mRNA can directly express proteins in the cytoplasm without relying on promoters, with a faster protein expression rate than transfected DNA. The protein expression level is directly related to the mRNA transfection level, and there is no risk of gene integration.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

## Product Data Sheet

---

### References:

[1]. Jemielity J, Fowler T, Zuberek J, et al. Novel "anti-reverse" cap analogs with superior translational properties. RNA. 2003;9(9):1108-1122.

**Caution: Product has not been fully validated for medical applications. For research use only.**

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**