

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	IgY, Chicken, clone 7C2, biotinylated		
<b>Catalog number</b>	HM4009BT-50UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	500 µl	<b>Amount</b>	50 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes						•		•
No								
N.D.	•	•	•	•	•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

- W: non-reduced conditions are used.

**General Information**

<b>Description</b>	The monoclonal antibody 7C2 can be used during various purification steps of IgY. The yolk of eggs laid by immunized chickens has been recognized as an excellent source of polyclonal antibodies (pAb). Specific antibodies produced in chickens offer several important advantages over producing antibodies in other mammals. Because a single egg contains as much antibody as an average bleed from a rabbit, this simple, non-invasive approach presents an appealing alternative to conventional pAb production methods. Purification of chicken egg yolk immunoglobulin Y (IgY), the 150 kDa IgG homolog, does not require animal bleeding. In addition, the eggs from immunized chickens provide a continual, daily source of pAb, and this convenient approach offers greater compatibility with animal protection regulations. Due to the phylogenetic distance between birds and mammals, there is greater potential of producing a higher percentage of specific antibody against mammalian antigens when using chickens. Highly conserved mammalian proteins sometimes fail to illicit a humoral response in animals, such as rabbits, that are traditionally used for generating pAb. Non-specific binding and need for cross-species immunoabsorptions is eliminated since chicken IgY does not cross-react with mammalian IgG and does not bind bacterial or mammalian Fc receptors. There are well defined structural differences of IgY-type immunoglobulins and the IgG of mammals. That includes the molar mass of the heavy chains of the immunoglobulins. The IgY-type immunoglobulins are much less flexible than IgG. Also, the structures of the Fc part of the immunoglobulin isotypes IgY and IgG are different. The 7C2 antibody is cross reactive for duck
<b>Cross reactivity</b>	Duck: Yes
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
04/11/2019

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).