Product Name

Monoclonal Mouse Anti-*Trypanosoma cruzi,* Immunoglobulin, clone 8E81F4

CAT No.

MQ 7.101-100

LOT No.

15071

Quantity

100 µg

Edition: April 22nd, 2015

Intended use

This product is for research use only. <u>NOT for use in diagnostic or therapeutic procedures.</u>

This product is tested for use in enzyme-linked immunosorbent assay (ELISA) and immunofluorescence.

Reagent provided

The antibody has been lyophilized in a 10 mM ammonium bicarbonate buffer.

Isotype

Mouse IgG

Immunogen

P015 peptide; C-terminal peptide from the ribosomal P0 protein of *Trypanosoma cruzi (T. cruzi)*.

Specificity

Specificity has been tested in ELISA (figure 1) and immunofluorescence (figure 2).

Purity

Protein A purified.

Precautions

- 1. For professional users.
- As with any product derived from biological sources, proper handling procedures should be used.
- The product may be used in different techniques and in combination with different sample types and materials, therefore each individual laboratory should validate the applied test system.

Preparation of the antibody

- Recommended antibody concentration: 0.5 mg/ml.
- Recommended solvent: 100 mM PBS or Tris-HCl, pH 7.0.
- \bullet $\,$ Additional sodium azide (up to 0.05%) is recommended for prolonged storage.
- For a 0.5 mg/ml antibody concentration, dissolve in 200 μ l buffer. NOTE: Be careful opening the vial since the antibody resides in

Storage instructions

For long-term storage keep lyophilized batch at -20°C. After dissolving, store at 2-8°C. For prolonged storage add sodium azide to 0.05%.

Application guidelines

ELISA: 0.04 – 10 µg/ml

Immunofluorescence: 1,5 μg/ml

Unless the stability in the actual test system has been established, it is recommended to dilute the product immediately before use.

Relevance

T. cruzi is a protozoan parasite. Upon infection, this parasite causes Chagas disease, a tropical disease caused by a bite by Triatominae, which, in some patients, might result in hearth failure. Patients with chronic Chagas



disease develop antibodies against P2 β and P0 (two ribosomal proteins of *T. cruzi*), which cross-react with cardiac receptor.

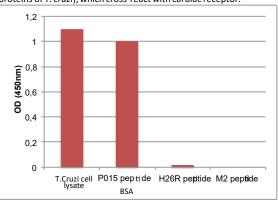
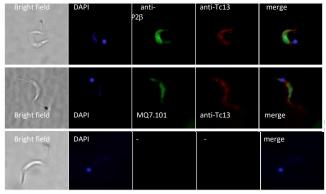


Figure 1: Specificity of anti-*T.cruzi* Immunoglobulin, clone 8E81F4, determined by ELISA. Antibody diluted to 75 μg/ml in PBS containing 0.05% tween-20 and 1% BSA was tested on *T.cruzi* cell lysates, P015 peptide (C-terminal peptide from the ribosomal P0 protein of *T. cruzi*),



H26R protein (B1 andreneric receptor; negative control) and M2 peptide (muscarinic receptor; negative control).

Figure 2: Specificity of anti-T.cruzi Immunoglobulin, clone 8E81F4, determined by immunofluorescence on T.cruzi trypomastigotes. Cells were fixed, permeabilized and incubated with MQ7.101 (1,5 μ g/ml) and anti-Tc13 (1/500; recognizing a T.cruzi membrane protein). Binding of the antibodies was detected using anti-mouse \lg G Alexa 488 (1/1000) and anti-rabbit \lg G Cy3 (1/200).

Acknowledgement

K.A. Gomez and L.M. Tasso

Laboratory of Molecular Biology of Chagas Disease (LaBMECh), Instituto

de Investigaciones en Ingeniería Genética y Biología Molecular (INGERI-

CONICET), Buenos Aires, Argentina.