Ovalbumin (6F11): sc-57519



The Power to Question

BACKGROUND

Ovalbumin is a member of the serpin superfamily of proteins, although unlike most of the serpins, it is unable to inhibit any proteases. Ovalbumin is the main protein present in egg white, and it may function as a storage protein. It is a secreted glycoprotein of 385 amino acids. Ovalbumin is able to chelate to heavy metals and trap the metal ions within the matrix of the protein, so it is commonly administered in cases where poisoning by heavy metals is suspected. It is also useful in many research settings such as proteomics, where it is commonly used as a molecular weight marker for calibrating electrophoresis gels, or in immunology to stimulate an allergic reaction in test subjects. Because it is available in large quantities, Ovalbumin is advantageous in general studies of protein structure and properties.

REFERENCES

- 1. Mine, Y. and Rupa, P. 2003. Fine mapping and structural analysis of immunodominant IgE allergenic epitopes in chicken egg Ovalbumin. Protein Eng. 16: 747-752.
- Ferrer-Martínez, A., Marotta, M., Baldán, A., Haro, D. and Gómez-Foix, A.M. 2004. Chicken Ovalbumin upstream promoter-transcription factor I represses the transcriptional activity of the human muscle glycogen phosphorylase promoter in C2C12 cells. Biochim. Biophys. Acta 1678: 157-162.
- Funabashi, H., Shima, M., Kuwaki, T., Hiroshima, K. and Kuriyama, T. 2004. Effects of repeated ozone exposure on pulmonary function and bronchial responsiveness in mice sensitized with Ovalbumin. Toxicology 204: 75-83.
- Pinto, L.A., Pitrez, P.M., Fontoura, G.R., Machado, D.C., Jones, M.H., Graeff-Teixeira, C. and Stein, R.T. 2004. Infection of BALB/c mice with Angiostrongylus costaricensis decreases pulmonary inflammatory response to Ovalbumin. Parasite Immunol. 26: 151-155.
- Benarafa, C. and Remold-O'Donnell, E. 2005. The Ovalbumin serpins revisited: perspective from the chicken genome of clade B serpin evolution in vertebrates. Proc. Natl. Acad. Sci. USA 102: 11367-11372.
- Yamamoto, K., Kawamura, I., Tominaga, T., Nomura, T., Kohda, C., Ito, J. and Mitsuyama, M. 2005. Listeriolysin O, a cytolysin derived from *Listeria* monocytogenes, inhibits generation of Ovalbumin-specific Th2 immune response by skewing maturation of antigen-specific T cells into Th1 cells. Clin. Exp. Immunol. 142: 268-274.
- 7. Metugriachuk, Y., Tsuchiya, J., Marotta, F., Kawakita, S., Okura, R., Kuroi, O. and Minelli, E. 2006. Effect of a prebiotic-enriched phytocompound in improving Ovalbumin allergenicity. Chin. J. Dig. Dis. 7: 206-210.
- Riggs, K.A., Wickramasinghe, N.S., Cochrum, R.K., Watts, M.B. and Klinge, C.M. 2006. Decreased chicken Ovalbumin upstream promoter-transcription factor II expression in tamoxifen-resistant breast cancer cells. Cancer Res. 66: 10188-10198.

SOURCE

Ovalbumin (6F11) is a mouse monoclonal antibody raised against Ovalbumin of chicken origin.

PRODUCT

Each vial contains 100 $\mu g\ lgG_1$ in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Ovalbumin (6F11) is recommended for detection of Ovalbumin of avian origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Molecular Weight of Ovalbumin: 45 kDa.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com