Product Specification Sheet

Chicken conalbumin (ovotransferrin) proteins Antibodies

Cat # CECA15-S	**Rabbit** Anti-Chicken conalbumin protein antiserum	**SIZE**: 100 ul
Cat # CECA15-C	Chicken conalbumin protein control for Western blot	**SIZE**: 100 ul
Cat # CECA16-N	Chicken conalbumin proteins	**SIZE**: 10 mg

Allergy to chicken egg or proteins is one of the more frequent causes of food hypersensitivity in infants and young children. Both IgG and IgA class antibodies may be detected. Ovalbumin intolerance has been implicated in a number of conditions affecting children. In particular, children with cystic fibrosis show elevated anti-ovalbumin antibodies. Ovalbumin antibodies have also been noted in some forms of kidney disease. A relationship between food allergy and infantile autism has also been observed. Children with insulin-dependent diabetes mellitus show an enhanced immune response to both β-lactoglobulin and ovalbumin, a phenomenon that may be related to the development of the disease. Conditions related to ovalbumin intolerance usually resolve once egg and egg based foods have been withdrawn from the patient's diet.

Intolerance to egg proteins could be due not only to the ovalbumin protein found in egg white but also to other major proteins present in the yolk. The major proteins of chicken eggs are: Ovalbumin (45 kda, 54%), Conalbumin (13%, 80 kda), Ovomucoid(11%, 28 kda), Lysozyme (3.5%, 14 kda), Globulins (G2, G3) (8.0%, mol wt?), Ovomucin (1.5%, mol wt?). Other protein components include, flavoprotein (0.8%), ovoglycoprotein (0.5%), ovomacroglobulin (0.5%), ovoinhibitor (0.l%) and avidin (0.05%).

Conalbumin (Ovotransferrin precursor (Conalbumin) (Allergen Gal d 3) (Gal d III) (Serum transferrin) is produced from a precursor of 705 aa. it is found in egg white. Conalbumin or transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may also have a further ole in stimulating cell proliferation. Transferrin has a bacteriostatic function. Its concentration in avian egg is the highest concentration of any transferrin in vivo. Transferrin in liver is regulated by the iron levels but not in the oviduct. These two forms of transferrin (liver and oviduct) differ only by their carbohydrate composition. It causes an allergic reaction in human

Source of Antigen and Antibodies

Antigen	Highly purified chicken egg white conalbumin (Cat # CECA16-N)
Ab Host/type	Rabbit, Polyclonal antiserum # CECA15-S
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control

Chicken egg conalbumin was purified (95%) form egg white (Cat # CECA16-N). The proteins are supplied in liquid at 10 mg/ml in PBS 0.05% azide or in powder form. Reconstitute powder in PBS at 1-10 mg/ml. It can be used positive control for antibody #CECA15-S or for coating ELISA plates.

For Western blot +ve control (Cat # CECA15-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of #CECA15-C for good visibility with antibody Cat #CECA15-S. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the CECA15-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
100ul solution lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting (1:1K-5K using Chemiluminescence technique)..

ELISA (1:10-50K; using 50-100 ng control antigen/well).

References: Jeltsch JM (1987) Nucl Acid Res. 15, 7643-7645; Thibodeau SN (1978) JBC 253, 3771-3774; Williams J (1982) Eur. J. Biochem. 122, 297-303; Jacquinot PM (1994) Glycobiol. 4, 617

*This product is for In vitro research use only.

Ovalbumin ELISA and anti-ovalbumin IgG, IgM ELISA Mouse and Rat anti-ovalbumin ELISA kits
CECA15-S-C-16-N

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, S an Antonio, T X 7 8 24 4 , U S A;

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400
Fax: +91-11-42208444 Email: customerservice@lifetechindia.com Website: www.lifetechindia.com