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Certificate of Analysis

Product: Affinity Purified Anti-*Drosophila melanogaster* Aubergine/Sting (Rabbit)

Code: 600-401-947

Lot #: 18044cr

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 1.48 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Background Information: Aubergine (Sting) is a *Drosophila* protein involved in germ-line development and RNA interference. *Drosophila melanogaster* has a robust and efficient innate immune system, which reacts to infections ranging from bacteria to fungi and, as discovered recently, viruses as well. The known *Drosophila* immune responses rely on humoral and cellular activities, similar to those found in the innate immune system of other animals. Recently, RNAi or 'RNA silencing' has arisen as a possible means by which *Drosophila* can react to specific pathogens, transposons and retroviral elements, in a fashion similar to that of a traditional mammalian adaptive immune system instead of in a more generalized and genome encoded innate immune-based response. RNAi is a highly conserved regulation and defense mechanism, which suppresses gene expression via targeted RNA degradation directed by either exogenous dsRNA (cleaved into siRNAs) or endogenous miRNAs. In plants, RNAi has been found to act as an antiviral immune response system. In *Drosophila* multiple core RNAi pathway genes have been reported, including piwi, vasa intronic gene (vig), aubergine (aub), armitage (armi), Rm62, r2d2 and Argonaute2 (AGO2).

Recommended Dilutions:

ELISA	1:6,000 - 1:30,000
WESTERN BLOT	1:500 - 1:3,000
IF MICROSCOPY	User Optimized
OTHER APPLICATION	User Optimized

Application Note(s): This affinity-purified antibody has been tested for use in ELISA. Specific conditions for reactivity should be optimized by the end user. By western blot a band approximately 98 kDa in size corresponding to Aubergine protein is expected in the appropriate cell lysate or extract.

Purity and Specificity: This affinity-purified antibody is directed against *Drosophila* Aubergine protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest limited cross reactivity with Aubergine protein from other sources.

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of *Drosophila melanogaster* Aubergine/Sting protein.

Relevant Links:

NCBI [NP_476734](#)

Swiss-Prot [O76922](#)

Target Protein: *Drosophila melanogaster* Aubergine/Sting, 866 aa, predicted MW 98.6 kDa

General References:

Schmidt,A., Hollmann,M. and Schafer,U. (1996) A newly identified Minute locus, M(2)32D, encodes the ribosomal protein L9 in *Drosophila melanogaster*. *Mol. Gen. Genet.* **251** (3), 381-387.

Schmidt,A., Palumbo,G., Bozzetti,M.P., Tritto,P., Pimpinelli,S. and Schafer,U. (1999) Genetic and molecular characterization of sting, a gene involved in crystal formation and meiotic drive in the male germ line of *Drosophila melanogaster*. *Genetics* **151** (2), 749-760.

Mason,J.M., Ransom,J. and Konev,A.Y. (2004) A deficiency screen for dominant suppressors of telomeric silencing in *Drosophila*. *Genetics* **168** (3), 1353-1370.

Tomari,Y., Du,T., Haley,B., Schwarz,D.S., Bennett,R., Cook,H.A., Koppetsch,B.S., Theurkauf,W.E. and Zamore,P.D. (2004) RISC assembly defects in the *Drosophila* RNAi mutant armitage. *Cell* **116** (6), 831-841.

Cook,H.A., Koppetsch,B.S., Wu,J. and Theurkauf,W.E. (2004) The *Drosophila* SDE3 homolog armitage is required for oskar mRNA silencing and embryonic axis specification. *Cell* **116** (6), 817-829.

Related Products:

#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
#611-132-122	IRDye800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#B501-0500	500 g BLOTTO
#BSA-30	500 ml 30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer)
#B304	10 ml NORMAL GOAT SERUM (NGS)
#KIA-003	MaxTag [™] Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting

USDA Certification: All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

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