

# CALTAG LABORATORIES

## PRODUCT INSERT

### HAMSTER anti-MOUSE $\alpha\beta$ TCR

Product Code	Form	Volume	Antibody*	Excitation (nm)	Peak Emission (nm)	Matching Isotype Controls	
HM3600	Purified	1.0 ml	200 $\mu$ g	N/A	N/A	Hamster IgG Purified	Code HM00
HM3615	Biotin	1.0 ml	100 $\mu$ g	N/A	N/A	Hamster IgG Biotin	Code HM15
HM3615-3	Biotin	3.0 ml	300 $\mu$ g				
HM3620	Alexa 488 <sup>†</sup>	1.0 ml	100 $\mu$ g	488	519	Hamster IgG Alexa 488	Code HM20
HM3601	FITC	1.0 ml	100 $\mu$ g	488	525	Hamster IgG FITC	Code HM01
HM3601-3	FITC	3.0 ml	300 $\mu$ g				
HM3604	R-PE	0.5 ml	50 $\mu$ g	488	575	Hamster IgG R-PE	Code HM04
HM3604-3	R-PE	3.0 ml	300 $\mu$ g				
HM3606	TC <sup>‡</sup>	0.5 ml	100 $\mu$ g	488	670	Hamster IgG TC	Code HM06
HM3618	PE-Cy5.5	0.5 ml	100 $\mu$ g	488	694	Hamster IgG PE-Cy5.5	Code HM18
HM3605	APC	0.5 ml	100 $\mu$ g	600-650	660	Hamster IgG APC	Code HM05
HM3621	Alexa 647 <sup>†</sup>	1.0 ml	100 $\mu$ g	600-650	668	Hamster IgG Alexa 647	Code HM21

#### PRODUCT DESCRIPTION

Hamster monoclonal antibody to the mouse  $\alpha\beta$  T-cell Receptor (TCR)

**Clone:** H57-597

**Isotype:** Hamster IgG

**Immunogen:** Affinity purified DO11.10 TCR<sup>1</sup>

**Lot No.:** See label      **Expiration:** See label

**Buffer:** Phosphate buffered saline (PBS)

**Preservatives:** 0.1% *sodium azide*. Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Solutions containing sodium azide should be disposed of properly.

**Stabilizer:** For conjugated products only, a highly purified grade of BSA has been added as a stabilizing protein to bring the final protein concentration to 4-5 mg/ml after conjugation.

#### STORAGE AND HANDLING

Store reagents at 2-8°C. Light exposure should be avoided with fluorochrome-conjugated reagents. Use dim light during handling, incubation with cells and prior to analysis. It is recommended that cells be analyzed within 18 hours of staining. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted.

#### PRODUCT CHARACTERIZATION

**Antigen Specificity:** The H57-597 monoclonal antibody (mAb) reacts with all mouse  $\alpha\beta$  TCR expressing T cells via the  $\beta$  chain of the T-cell receptor. The H57-597 mAb does not react with the mouse  $\gamma\delta$  TCR. Immobilized H57-597 mAb has been reported to activate T cells bearing  $\alpha\beta$  TCR<sup>1</sup>. Other applications of the H57-597 mAb include immunoprecipitation and immunostaining for flow cytometry<sup>1</sup>.

#### PRODUCT QUALITY CONTROL

Every lot is tested by flow cytometry using freshly harvested mouse lymph node cells. From this testing it is recommended that between 0.25 and 0.5  $\mu$ g of antibody be used per 1 x 10<sup>6</sup> cells in a 100  $\mu$ l staining volume. Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for their application.

#### REFERENCE:

1. Kubo, R. T., W. Born, J. W. Kappler, P. Marrack, and M. Pigeon. 1989. Characterization of a monoclonal antibody which detects all murine  $\alpha\beta$  T cell receptors. *J. Immunol.* 142: 2736-2742.

\* The amount of antibody is determined by measuring the optical density using a spectrophotometer. The antibody titer is verified by immunofluorescent staining and flow cytometric analysis.

<sup>†</sup> The Alexa Fluor<sup>®</sup> dye antibody conjugates in this product are sold under license from Molecular Probes, Inc., and are covered by pending and issued patents.

<sup>‡</sup> TC, TRI-COLOR<sup>®</sup>, PE-Cy5

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