



## CELL LAB Mouse Anti-Chicken CD28

<u>Cat. No.</u>	<u>Form</u>	<u>Quantity</u>
733067	Purified (UNLB) Antibody	0.5 mg
733068	Fluorescein (FITC) Conjugate	0.5 mg
733069	Biotin (BIOT) Conjugate	0.5 mg
733070	Phycoerythrin (PE) Conjugate	0.1 mg

### For Laboratory Use Only

#### DESCRIPTION

<b>Clone:</b>	AV7
<b>Isotype:</b>	Mouse IgG1 $\kappa$
<b>Specificity:</b>	Chicken CD28, a monomeric molecule of Mr 40-44 kDa with 50% amino acid sequence identity with mammalian CD28

Chicken CD28 antigen is a type I transmembrane monomeric glycoprotein which does not contain the cysteine residues that form disulfide-linked covalent homodimers found in the mammalian counterpart. This may reduce the avidity of binding to individual ligand molecules expected to be present on antigen presenting cells. Peripheral  $\gamma\delta^+$  T cells are CD28-negative.<sup>1</sup> Monoclonal antibodies (MAbs) against CD28 have a co-stimulatory effect on T cells stimulated by phorbol myristate acetate (PMA), concanavalin A or MAbs against the avian T cell receptor (TCR). Both V $\beta$ 1- and V $\beta$ 2-expressing cells respond equally well to stimulation with anti-CD28 in combination with PMA. These responses are resistant to cyclosporin A, but inhibited by herbimycin A, suggesting that CD28 employs a signaling pathway at least partly distinct from that triggered by TCR/CD3.<sup>2</sup> MAb AV7 also reacts with turkey CD28 as demonstrated by flow cytometry and immunoprecipitation/Western blotting.

#### APPLICATIONS

- Flow cytometry<sup>1</sup>
- Immunoprecipitation<sup>1</sup>
- *In vitro* T-cell co-stimulation<sup>2</sup>

#### CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested to conform with characteristics of a standard reference reagent using flow cytometry.

#### WORKING DILUTIONS

<b>Flow Cytometry:</b>	FITC conjugate	$\leq 1 \mu\text{g}/10^6$ cells
	BIOT conjugate	$\leq 1 \mu\text{g}/10^6$ cells
	PE conjugate	$\leq 0.2 \mu\text{g}/10^6$ cells

**Other Applications:** Since applications vary, determine the optimum working dilution of the product that is appropriate for your specific needs.

## HANDLING AND STORAGE

- The purified antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.0. No preservatives or amine-containing buffer salts added.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>, pH 7.4.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>.
- The phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent.
- Protect fluorochrome-conjugated forms from light. Do not freeze.
- Reagent is stable until the expiration date on the vial when stored at 2-8°C.

## STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Minimize exposure of reagent to light during storage or incubation.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use Good Laboratory Practice (GLP) when handling this reagent.
7. Harmful if swallowed.
8. After contact with skin, wash immediately with plenty of water.
9. Contains sodium azide. Sodium azide under acidic conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, immediately wash excessively with water.

## TRADEMARKS

The Beckman Coulter logo is a trademark of Beckman Coulter, Inc.

For additional information or if damaged product is received, contact your local Beckman Coulter Representative.

## REFERENCES

1. Young JR, Davison TF, Tregaskes CA, Rennie MC and Vainio O. 1994. Monomeric homologue of mammalian CD28 is expressed on chicken T cells. *J Immunol*, 152:3848-3851.
2. Arstila TP, Vainio O and Lassila O. 1994. Evolutionarily conserved function of CD28 in alpha beta T cell activation. *Scand J Immunol*, 40:368-371.



Manufactured for:  
Beckman Coulter, Inc.  
4300 N. Harbor Blvd.  
Fullerton, CA 92835  
[www.beckmancoulter.com](http://www.beckmancoulter.com)

Printed in USA  
Made in USA

© 2005 Beckman Coulter, Inc.  
All Rights Reserved.

PN 734103-A