

COULTER CLONE®

IL-2R(p75)-FITC

	IL-2R(p75)-FITC
Specificity	CD122
Clone	2RB ^{1,4}
Hybridoma	NS-1 x BALB/c
Immunogen	YT-2C2 cells
Ig Chain	IgG1
Species	Mouse
Source	Ascites fluid
Purification	Affinity chromatography
Fluorescence	FITC (Green) Excites at 468-509 nm Emits at 504-541 nm
Conjugation	FITC (Fluorescein isothiocyanate)
Molar Ratio	FITC/protein 3-10

REF 6604931 - 100 tests

PN 4236266-E



MONOCLONAL ANTIBODY

For Research Use Only.

Not for use in diagnostic procedures.

ANTIBODY SPECIFICITY

The 2RB antibody defines the IL-2R(p75) receptor,¹ also known as CD122. The 75 kD protein is the β chain of the IL-2 receptor complex. The molecule is expressed constitutively on natural killer cells, but is upregulated on T cells only upon activation.² CD122, in association with the IL-2R γ chain, forms an intermediate affinity IL-2 receptor but requires the further association of the α chain, CD25 to form a functional high affinity receptor.³ The cytoplasmic tail of CD122 is necessary for signal transduction.³

REAGENT

See table above.

REAGENT CONTENTS

The final concentration of nonantibody reagents when reconstituted is 0.2% gelatin, 0.01 M potassium phosphate, 0.15 M NaCl and 0.1% NaN₃.

STATEMENT OF WARNINGS

1. This reagent contains 0.1% sodium azide. Sodium azide under acid 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, wash excessively with water.
2. 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.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use reagent beyond the expiration date on the vial label.
5. Minimize exposure of reagent to light during storage or incubation.
6. Avoid microbial contamination of reagent or erroneous results may occur.
7. Use Good Laboratory Practices (GLP) when handling this reagent.
8. Harmful if swallowed.
9. After contact with skin, wash immediately with plenty of water.

STORAGE CONDITIONS AND STABILITY

Unreconstituted, lyophilized reagent is stable to the expiration date on the vial label when stored at 2-8°C. Do not freeze. Minimize exposure to light.

Reconstituted stock solution of lyophilized reagent is stable as follows:

- 6 months when stored at 2-8°C or 0 to -20°C when reconstituted using the Reconstitution Procedure described in the REAGENT PREPARATION section. If all of a reconstituted reagent is not to be used within 6 months, follow the Freezing Procedure.
- 1 year when stored at -70°C using the Freezing Procedure.

Freezing Procedure

MATERIALS REQUIRED BUT NOT SUPPLIED:

PBS - Phosphate Buffered Saline (pH=7.2)

PN 6603369

PBS containing 2% heat-inactivated fetal or newborn calf serum (FCS). Dilute 2 mL of calf serum to 100 mL with PBS.

1. Dilute the reconstituted stock solution of the COULTER CLONE reagent with PBS containing 2% FCS prior to freezing as follows:

Add 5 μ L of reconstituted stock solution (1 test*) to 100 μ L of PBS with 2% FCS**.
*These may be frozen in multiple test volume aliquots.
**This yields 2X the concentration of the working solution.
2. Prior to use, allow the frozen aliquot to reach 20-25°C.
3. The frozen aliquot, at 2X the final concentration, must be further diluted to equal the total volume as calculated in the REAGENT PREPARATION section. Dilute each aliquot with the appropriate volume of PBS without 2% FCS and mix well.
4. Avoid repeated freeze/thaw cycles. This will denature the antibody protein.
5. Do not store in a self-defrosting freezer.

EVIDENCE OF DETERIORATION

Any change in the physical appearance of this reagent* or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used. If the lyophilized material appears moist, do not use.

*Normal Appearance of Reagent

FITC labeled: Lyophilized-white to yellow-orange plug
Reconstituted-clear, colorless to yellow-green liquid

REAGENT PREPARATION

Reconstitute the lyophilized COULTER CLONE IL-2R(p75)-FITC reagent by adding 500 μ L of distilled water to the vial. This is the stock solution. Centrifuge the stock solution at 20-25°C at 100,000 x g for 10 minutes to optimize staining results. Use this liquid reagent directly from the vial as the stock solution. The reagent working solution* is prepared as follows (volume listed is on a per test basis):

Add 5 μ L of stock solution to 195 μ L of PBS**.

*Diluted reagent working solution is good for day of preparation only.

**PBS - Phosphate Buffered Saline (pH=7.2).

Bring reagent to 20-25°C prior to use.

USAGE

This reagent is for use with standard flow cytometry methodologies.

The use of IL-2R(p75)-FITC in this reagent is not intended for enumeration of activated cells in clinical diagnostic applications.

SELECTED RESEARCH REFERENCES

1. Kamio M, Uchiyama T, Arima N, Itoh K, Ishikawa T, Hori T and Uchino H. 1990. Role of a chain IL-2 complex in the formation of the ternary complex of IL-2 and high-affinity IL-2 receptor. *Immunol* 2:521-530.
2. Caligiuri MA, Zmuidzinas A, Manley TJ, Levine H, Smith KA and Ritz J. 1990. Functional consequences of interleukin-2 receptor expression on resting human lymphocytes: Identification of a novel natural killer cell subset with high affinity receptors. *J Exp Med* 171:1509-1526.
3. Barclay AN, Brown MH, Law SKA, McKnight AJ, Tomlinson MG and van der Merwe PA, eds. 1993. *Leucocyte Antigen Facts Book*. London: Academic Press. p. 486-489.
4. Schlossman SF, Boumsell, L, Gilks W, Harlan JM, Kishimoto T, Morimoto C, Ritz J, Shaw S, Silverstein R, Springer T, Tedder TF and Todd RF, eds. 1995. *Leucocyte Typing V*. Oxford, UK: Oxford University Press. p. 1858.

PRODUCT AVAILABILITY

COULTER CLONE IL-2R(p75)-FITC
PN 6604931 - 100 tests (0.5 mL)

For additional information, or if damaged product is received, call Beckman Coulter Customer Service at 800-526-7694 (USA or Canada) or contact your local Beckman Coulter Representative.

TRADEMARKS

Beckman Coulter logo and COULTER CLONE are trademarks of Beckman Coulter, Inc.



Beckman Coulter, Inc.
4300 N. Harbor Blvd.
Fullerton, CA 92835
www.beckmancoulter.com

Printed in USA
Made in USA

© 2007 Beckman Coulter, Inc.
All Rights Reserved.