

COULTER CLONE® IL-2R1-FITC

	IL-2R1-FITC
Specificity	CD25
Clone	1HT44H3 ^{3,4}
Hybridoma	NS-1 x BALB/c
Immunogen	IL - 2 dependent T cells
Ig Chain	IgG2a
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 6603200 - 100 tests

PN 4235542-H



ANALYTE SPECIFIC REAGENT

Analytical and performance characteristics are not established.

ANTIBODY SPECIFICITY

The IL-2R1 antibody defines the α chain of the IL-2 receptor (CD25). This chain has a molecular weight of 55 kD.¹ It is expressed on many activated hematologic cells, including T cells, B cells and monocytes, as well as NK cells cultured in the presence of IL-2.¹ CD25 is a low affinity receptor, which upon T cell activation, associates with the β and γ chains to form a functional high affinity complex.² The IL-2R1 antibody inhibits the ability of IL-2 to induce proliferation in T cells.³

REAGENT

See table above.

REAGENT CONTENTS

The antibody concentration is 2.5 μ g/test. 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-2R1-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 fluorescence microscopy and/or flow cytometry methodologies.

The use of IL-2R1-FITC in this reagent is not intended for enumeration of activated cells in clinical diagnostic applications.

SELECTED RESEARCH REFERENCES

1. 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.
2. Minami Y, Kono T, Miyazaki T and Taniguchi T. 1993. The IL-2 receptor complex: Its structure, function, and target genes. Annual Rev Immunol 11:245-267.
3. Fox DA, Hussey RE, Fitzgerald KA, Bensusan A, Daley JF, Schlossman SF and Reinherz EL. 1985. Activation of human thymocytes via the 50 kD T11 sheep erythrocytes binding protein induces the expression of interleukin-2 receptor on both T3+ and T3- populations. J Immunol 134:330.
4. Fox DA, Hussey RE, Fitzgerald KA, Aculo O, Poole CB, Palley L, Daley JF, Schlossman SF and Reinherz EL. 1984. Ta1, a novel 105 kD T cell activation antigen defined by a monoclonal antibody. J Immunol 133:1250.

PRODUCT AVAILABILITY

COULTER CLONE IL-2R1-FITC
PN 6603200 - 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.

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