

# IOTest Conjugated Antibody CD2-ECD

	Specifications
Specificity	CD2
Clone	39C1.5
Hybridoma	X63 x rat
Immunogen	PHA-stimulated human lymphoblasts
Isotype	IgG2a
Species	Rat
Purification	Affinity Chromatography
Fluorochrome	R Phycoerythrin-Texas Red-X (ECD)
Molar ratio	ECD / Ig: 0.5-1.5
$\lambda$ excitation	488 nm
Emission Peak	613 nm
Buffer	PBS pH 7.2 plus 2 mg / mL BSA and 0.1% NaN <sub>3</sub>

**REF** B46023 Liquid - 0.5 mL

## Analyte Specific Reagent.

Analytical and performance characteristics are not established

## REAGENTS

Concentration: See lot specific Certificate of Analysis at [www.beckmancoulter.com](http://www.beckmancoulter.com).

## WARNING AND PRECAUTIONS

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 considered potentially infectious 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 antibody beyond the expiration date on the label.
5. Do not expose reagents to strong light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use good laboratory practices when handling this reagent.
8. Any change in the physical appearance of the reagents may indicate deterioration and the reagent should not be used.

## GHS HAZARD CLASSIFICATION

Not classified as hazardous

## STORAGE AND HANDLING CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C. Do not freeze.

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

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Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).

To avoid the possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.

## **SPECIFICITY**

CD2 is considered as a member of the immunoglobulin superfamily; it possesses two immunoglobulin-like domains in its extracellular portion (1, 2). CD2 expression and molecular interaction is related with human T-lymphocyte-mediated cytotoxicity (3). Cell adhesion molecule CD2 and its ligand CD58 provide good examples of protein-protein interactions in cells that participate in the immune response. Further, intracellular CD2 signaling pathways and networks are being discovered by the identification of several cytosolic tail binding proteins (4). Recently it has been demonstrated that CD2-CD58/48 receptor-ligand interaction promotes and is required for nanotube formation in human NK cells aiding NK cell cytotoxic function (5). Monoclonal antibody 39C1.5 inhibits rosette formation with sheep red cells (6).

It was assigned to CD2 during the 2nd HLDA Workshop on Human Leucocyte Differentiation Antigens, held in Boston, United States, in 1984 (WS Code: 144, Section T) (7, 8).

## **LIMITATIONS**

Due to the tandem structure of the fluorochrome, ECD also emits light at 575 nm. This secondary emission peak varies from lot-to-lot of ECD. Therefore, for multi-color analysis, the compensation matrix should be carefully checked when changing the lot of a ECD -conjugate.

## **TRADEMARKS**

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## **ADDITIONAL INFORMATION**

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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## **REFERENCES**

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