

## ***iLite*<sup>®</sup> CD3 Effector Assay Ready Cells**

REF: BM5005

*For research use only. Not for use in diagnostic procedures.*

### **DESCRIPTION**

*iLite*<sup>®</sup> CD3 Effector Assay Ready Cells are human engineered cells (Jurkat, ATCC #TIB-152). The CD3 Effector Assay Ready cells can be used alone or in combination with a target cell to measure a biological response when the NFAT pathway is induced by activation of the CD3 receptor on the effector cell, resulting in the reporter luciferase expression.

Normalization of cell counts, serum matrix effects or lysis of the effector cells by the target cells is obtained by a second reporter gene, a Renilla Luciferase reporter gene construct, under control of a constitutive promoter.

### **CONTENT**

>250 µL of *iLite*<sup>®</sup> Assay Ready Cells suspended in cryoprotective medium from Gibco (cat no 12648-010).

### **RECEIPT AND STORAGE**

Upon receipt confirm that adequate dry-ice is present, and the cells are frozen. Immediately transfer to -80°C storage. Cells should be stored at -80°C or at lower temperature and are stable as supplied until the expiry date shown. Cells should be diluted and plated immediately after thawing.

### **BACKGROUND**

CD3 is a complex of proteins on the surface of T cells. It is involved in activating both cytotoxic T cell (CD8+ naïve T cells) and T helper cells (CD4+ naïve T cells).

T cells play a major role in many diseases such as cancer and autoimmunity and a variety of immunotherapy strategies have been used in order to target T cells/T cell subsets by inducing physiological responses, inhibiting pathogenic responses or by genetically engineering T cells (1).

Several monoclonal therapeutic antibodies have been used in the clinic to inhibit tumor progression or to inhibit autoimmunity. Recently, bispecific antibodies (BsAbs) have been used in order to re-direct immune cells to the tumors by binding to the CD3 T cell and to the tumor cell simultaneously (2). The bispecific T cell engager Blinatumomab, directed against CD19 on B cells and CD3 on T cells, received FDA approval for the treatment of B cell malignancies in 2014 (1).

## APPLICATION

The *iLite*<sup>®</sup> CD3 Effector Assay Ready Cells can be used together with *iLite*<sup>®</sup> CD19 Target Assay Ready Cells for quantification of bi-specific antibody Blinatumomab activity. Please see:

- Quantification of bispecific anti-CD3-CD19 activity (LABEL-DOC-0592)

## RELATED PRODUCTS

REF	Product name
BM5025	<i>iLite</i> <sup>®</sup> CD19 (+) Target Assay Ready Cells
BM5026	<i>iLite</i> <sup>®</sup> CD19 (-) Target Assay Ready Cells
BM5001	<i>iLite</i> <sup>®</sup> ADCC Effector (V) Assay Ready Cells
BM5004	<i>iLite</i> <sup>®</sup> ADCP Effector Assay Ready Cells

## REFERENCES

1. Houot R, Schultz LM, Marabelle and A, Kohrt H. *T-cell-based Immunotherapy: Adoptive Cell Transfer and Checkpoint Inhibition*. Cancer Immunol Res 3(10):1115-22 (2015)
2. Goebeler M-E and Bargou R. *Blinatumomab: a CD19/CD3 bispecific T cell engager (BiTE) with unique anti-tumor efficacy* 57(5):1021-32.(2016)

## SYMBOLS ON LABEL

	Lot number		Temperature limitation
	Catalogue number		Biological risk
	Use by		Manufacturer

## PRECAUTIONS

For research use only. This product is intended for professional laboratory research use only. The data and results originating from using the product, should not be used either in diagnostic procedures or in human therapeutic applications.

*iLite*<sup>®</sup> ADCP Effector Assay Ready Cells are a stable transfected cell line of human origin classified as a Class 1 Genetically Modified Microorganism. They should be handled in accordance with EU regulations (2009/41/EC) and disposed of in a licensed contained-use facility in accordance with these regulations. When used in accordance with the manufacturer's product specification, the requirements of EC Directive 2009/41/EC on the contained-use of genetically modified microorganisms are deemed to have been met.

Residues of chemicals and preparations generally considered as biohazardous waste and should be inactivated prior to disposal by autoclaving or using bleach. All such materials should be disposed of in accordance with established safety procedures.

## PROPRIETARY INFORMATION

In accepting delivery of *iLite*<sup>®</sup> Assay Ready Cells the recipient agrees not to sub-culture these cells, attempt to sub-culture them or to give them to a third party, and only to use them directly in assays. *iLite*<sup>®</sup> cell-based products are covered by patents which is the property of Svar Life Science AB and any attempt to reproduce the delivered *iLite*<sup>®</sup> Assay Ready Cells is an infringement of these patents.