

## ***iLite*<sup>®</sup> mTNF-alpha (+) Target Assay Ready Cells**

REF: BM5013

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

### DESCRIPTION

*iLite*<sup>®</sup> mTNF-alpha (+) Target Assay Ready Cells are based on a human embryonic kidney cell line, HEK293<sup>1</sup> (ATCC# CRL-1573), and have been genetically engineered and optimized to express constant levels of the surface protein mTNF-alpha. The cells are for use as internal controls together with *iLite*<sup>®</sup> ADCC Effector (V) Assay Ready Cells for measuring the ADCC activity of anti-TNF-alpha antibodies.

### 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 (**do not store at any other temperature**) and are stable as supplied until the expiry date shown. Cells should be used within 30 min of thawing.

### BACKGROUND

Antibody-dependent cell-mediated cytotoxicity (ADCC) is a mechanism whereby pathogenic cells are lysed by lymphocytes, most often Natural Killer (NK) cells. The mechanism involves binding of antibodies to surface antigens on the pathogen. Crosslinking of these antibodies to NK cells through the binding of the Fc-portion to Fc receptors on the NK cells leads to activation of the NK cell and formation of an immune synapse with the pathogenic cell. The NK cell releases cytotoxic granules containing granzymes and perforin into the synapse, leading to apoptosis of the targeted cell (1).

### APPLICATION

The *iLite*<sup>®</sup> mTNF-alpha (+) Target Assay Ready Cells can be used together with *iLite*<sup>®</sup> ADCC Effector (V) and *iLite*<sup>®</sup> mTNF-alpha (-) Target Assay Ready Cells for the quantification ADCC activity of anti-TNF-alpha antibodies. Please see:

- Quantification of anti-mTNF-alpha ADCC activity (LABEL-DOC-0402)

### RELATED PRODUCTS

REF	Product name
BM5001	<i>iLite</i> <sup>®</sup> ADCC Effector (V) Assay Ready Cells
BM5014	<i>iLite</i> <sup>®</sup> mTNF-alpha (-) Target Assay Ready Cells
BM5095	<i>iLite</i> <sup>®</sup> anti-mTNF-alpha Activity Set

<sup>1</sup> The HEK-293 cell line has been used under a license obtained from AdVec Inc.

## REFERENCES

1. Weiner GJ. *Building better monoclonal antibody-based therapeutics*. Nat Rev Cancer 15: 361-70 (2015)

## 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> mTNF-alpha (+) Target Assay Ready Cells are a stable transfected cell line of human origin classified as a Class 1 Genetically Modified Microorganism. This is based on the conclusion that neither insert nor vector adds anything to the biosafety level since the cells cannot produce active virus. 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.