

***iLite*[®] IL-2 Assay Ready Cells**

REF: BM4002

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

DESCRIPTION

iLite[®] IL-2 Assay Ready Cells are avian DT-40 cells (ATCC# CRL-2111) which have been genetically engineered and optimized to be responsive to IL-2, resulting in a proportional expression of Firefly Luciferase. Normalization of cell counts, and serum matrix effects is obtained by a second reporter gene, a Renilla Luciferase reporter gene construct, under control of a constitutive promoter.

CONTENT

>250 µL of Assay Ready Cells suspended in cryoprotective medium from Amsbio (Cat. No 11888).

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 and should be diluted immediately after thawing.

BACKGROUND

Interleukin-2 (IL-2) is part of the body's natural response to microbial infection and a tool in the immune system discrimination between foreign ("non-self") and "self". It signals through the IL-2 receptor, a complex consisting of three chains, termed alpha, beta, and gamma. IL-2 has essential roles in key functions of the immune system, tolerance and immunity, primarily as a stimulant of T- and B-cell growth and maturation. IL-2 activates and stimulates the growth of immune cells, most importantly T-Cells, but also Natural Killer Cells (NK Cells), both can eliminate cancer cells directly. Anti-tumor effects of IL-2 appear to be mediated by its effects on NK Cells, Lymphokine-activated Killer Cells and other cytotoxic cells (1,2).

APPLICATION

The *iLite*[®] IL-2 Assay Ready Cells can be used for the quantification of IL-2 activity, or neutralizing antibody response against IL-2 in test samples, including human serum.

Application Notes for the following assays are available:

- Quantification of functional IL-2 (LABEL-DOC-0443)
- Quantification of IL-2 inhibitor (LABEL-DOC-0444)

RELATED PRODUCTS

REF	Product name
BM4012	<i>iLite</i> [®] IL-12 Assay Ready Cells
BM4023	<i>iLite</i> [®] IL-23 Assay Ready Cells

REFERENCES

1. Liao W, Lin JX, Leonard WJ (October 2011). "IL-2 family cytokines: new insights into the complex roles of IL-2 as a broad regulator of T helper cell differentiation". *Current Opinion in Immunology*. 23 (5): 598–604.
2. Gaffen SL, Liu KD (November 2004). "Overview of interleukin-2 function, production and clinical applications". *Cytokine*. 28 (3): 109–23.

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[®] IL-2 Assay Ready Cells are a stable transfected cell line of avian 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 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*[®] 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*[®] cell-based products are covered by patents which is the property of Svar Life Science AB and any attempt to reproduce the delivered *iLite*[®] Assay Ready Cells is an infringement of these patents.