# *iLite™* VEGF Assay Ready Cells

(REF: BM4020)

## Description

*iLite™* VEGF Assay Ready Cells is a human embryonic kidney cell line (HEK-293*; ATCC #CRL-1573) that have been genetically engineered and optimized to respond to VEGF with specific, proportional expression of Firefly Luciferase. Normalization of cell counts and serum matrix effects is obtained by a second reporter gene, a NanoLuc Luciferase reporter gene construct, under control of a constitutive promotor.

## Content

>250µl of Assay Ready Cells suspended in DMEM medium with 20% heat inactivated fetal bovine serum (FBS) and 10% dimethyl sulfoxide (DMSO).

## Receipt and storage

Upon receipt confirm that adequate dry-ice is present and the cells are frozen. Immediately transfer to -80°C storage. Cells are stored at -80°C 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

Vascular Endothelial Growth Factor (VEGF) is a signalling protein which is involved in both normal vascular growth and pathological angiogenesis. Without angiogenesis, growth of solid tumours would be limited by oxygen supply. Tumours which express VEGF can overcome this limitation and are thus able to grow and metastasize. For this reason, different anti-cancer therapies targeting VEGF have emerged, e.g. a humanized anti-VEGF antibody such as bevacizumab (Avastin™, Genentech) is currently widely used as a first-line therapy for colorectal cancer (1,2).

## Application

The *iLite*™ VEGF Assay Ready Cells can be used for the quantification of VEGF activity, VEGF inhibitor activity and for determination of neutralizing antibodies against VEGF inhibitors in human serum.

Application notes for the following assays are available:

- Quantification of functional VEGF using iLite™ VEGF Assay Ready Cells (E-216-GB)
- Quantification of VEGF inhibitor activity using *iLite™* VEGF Assay Ready Cells (E-203-GB)
- Determination of neutralizing antibodies against VEGF inhibitors using *iLite™* VEGF Assay Ready Cells (E-204-GB)

## References

1. Wang Y, Fei D, Vanderlaan M, Song A. *Biological activity of bevacizumab, a humanized anti-VEGF antibody in vitro.* Angiogenesis 7:335-345 (2004).

2. Risau, W. *Mechanisms of angiogenesis.* Nature 386: 671 – 674 (1997).

* The HEK-293 cell line has been used under a license obtained from AdVec Inc.

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## Symbols on label

| | | | |
|---|---|---|---|
| LOT | Lot number |  | Temperature limitation |
| REF | Catalogue number |  | Biohazard |
|  | 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™* VEGF Assay Ready Cells are a stable transfected cell line of human origin 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 are 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.

## Propriety 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 recipient is only to use them directly in assays. Biomonitor *iLite™* cell-based products are covered by patents which are the property of Euro Diagnostica AB and any attempt to reproduce the delivered *iLite™* Assay Ready Cells would constitute an infringement.