

## **CERTIFICATE OF ANALYSIS**

# instaCELL TNF- $\alpha$ Neutralization assay kit

CatNo: SF310-01 Lot#: TN-230127

Expiry Date: 05.05.2024

#### **PRODUCT DEFINITION**

Test kit to assess the neutralization potency of TNF- $\alpha$  inhibiting drugs by their application to cultures of mammalian cells and the subsequent determination of cell viability.

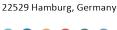
## **QUALITY SPECIFICATION OF THE CELLS**

|                                    | Batch Quality Control | Specification Limits  |  |
|------------------------------------|-----------------------|-----------------------|--|
| Cell Count                         | 3.2E+06               | 1.00E+06<>5E+06       |  |
| Homogenity (cell count)            | 98%                   | ≥ 90%                 |  |
| Viability (after thawing)          | 97%                   | ≥ 90%                 |  |
| Proliferative Capacity             | 94%                   | ≥ 70%                 |  |
| Debris/Cell Ratio                  | 0.2                   | ≤ 1.0                 |  |
| Aggregation                        | 1.2                   | ≤ 2.0                 |  |
| Sterility (bacteria, yeast, fungi) | passed                | negative after 7 days |  |
| Sterility (mycoplasma)             | passed                | negative by PCR       |  |
| Morphology                         | passed                | unalterd to reference |  |
| EC <sub>50</sub> Infliximab Ref.   | 13.4 ng/ml            | 2 ng/ml and 15 ng/ml  |  |
| R <sup>2</sup> Infliximab Ref      | 0.99                  | >0.97                 |  |

## **KIT CONTENT**

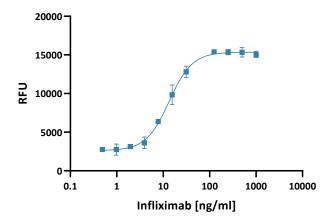
|                            | Cat-N°   | Lot#          | Storage  | Quantity |
|----------------------------|----------|---------------|----------|----------|
| Recovery Buffer A          | MD163-01 | 91-220505NR02 | -20°C    | 1        |
| Assay Buffer A             | MD363-06 | 91-220822MD02 | -20°C    | 1        |
| Infliximab Stock Solution  | RX516-01 | 91-220826MD01 | -80°C    | 1        |
| TNF- $lpha$ Stock Solution | RX517-01 | 91-220817NR01 | -80°C    | 1        |
| Actinomycin D              | KR115-08 | 220613        | RT       | 1        |
| Resazurin                  | RX718-01 | 91-220727MD01 | -20°C    | 1        |
| Assay Ready L-929 Cells    | RE772K   | 92-221114ML01 | < -140°C | 1        |
| 96-well Assay Plate        | ZG14-08  | 0023821       | RT       | 1        |

Sterility was analyzed by microscopic/visual control after seven days according to sterility testing. Functionality of the content was tested by performing the assay with all listed batches.



#### **NEUTRALIZATION ASSAY**





Dose-Response curve of the international Infliximab standard according to the assay protocol.

#### **METHODS**

**Cell Viability Parameters** (cell count, viability, aggregation, amount of debris) are determined in a CASY TT automatic cell counter. Homogeneity is analyzed in a plate-based assay.

**Proliferative Capacity** compares the mean growth rates of freshly thawed cells in relation to exponentially growing cells over 72 hours.

**Sterility** is tested by inoculation of aerob and anaerob growth broths (Tryptic Soy and Thioglycollate for bacteria, yeast and fungi) with samples and cultivation over a course of 7 days.

Mycoplasma are detected by PCR using a mycoplasma detection kit.

**Species Identity** is tested by amplification of a specific fragment of 18S rRNA coding region via multiplex PCR (dog, mouse, Chinese hamster, human, monkey, rat, pig and bovine).

**Human Cell Identity** is performed by STR analysis (DNA fingerprinting). Markers: D3S1358, D5S818, D7S820, D8S1179, D13S317, D16S539, D18S51, D2IS11, CSF1PO, FGA, TH01, TPOX and vWA, DYS391, D2S441, D1S1656, D2S1338, Y indel, D12S391, D19S433, D22S1045, D10S1248, SE33, Amelogenin.

Neutralization Assay: The assay was performed according to the assay protocol.

**LIMITED USE:** The product is provided under the terms of a limited use license provided with the kit. By breaking the sealed bag, the user is explicitly accepting the terms for limited use.