

## TNF-alpha cell line

TNF-alpha Looporter HEK293 Cell Line

CATALOG #  
**AAA78384**

APPLICATIONS  
**Functional Assay**

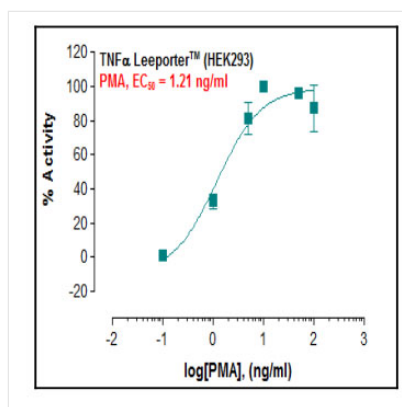
### PRODUCT SYNONYMS

TNF-alpha; TNF-alpha Looporter HEK293 Cell Line; TNF-alpha cell line

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form/Format                                     | Each vial contains 2 ~ 3 x 10 <sup>6</sup> cells in 1 ml of 90% FBS + 10% DMSO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sequence Length                                 | 233                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Applicable Applications for TNF-alpha cell line | FA (Functional Assay)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Dry Ice Note                                    | The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Functional validation                           | <p>A. Response of TNF-alpha Looporter™ – HEK293 cells to phorbol 12-myristate 13-acetate.</p> <ol style="list-style-type: none"> <li>1. Harvest TNF-alpha Looporter™ – HEK293 cells and seed cells into a white solid-bottom 96-well microplate in 100 ul of growth medium at 5 x 10<sup>4</sup> cells/well.</li> <li>2. Incubate cells at 37 degree C in a CO2 incubator for overnight.</li> <li>3. The next day, stimulate cells with different concentrations of phorbol 12-myristate 13-acetate (PMA).</li> <li>4. Incubate at 37 degree C in a CO2 incubator for 6-16 hours.</li> <li>5. Add 50 ul of luciferase assay reagent per well.</li> <li>6. Incubate at room temperature for 1-5 minutes and measure luminescence using a microplate luminometer.</li> </ol> |
| Preparation and Storage                         | <p>Immediately upon receipt, store in liquid nitrogen.</p> <p><b>Dry Ice Shipment:</b> Extra charge fee may add to your shipping cost as dry ice is required to ship this product.</p> <p><b>Shipping Note:</b> Product is available for shipment in the United States, Canada and European countries. Please inquire for shipment to other countries.</p>                                                                                                                                                                                                                                                                                                                                                                                                                 |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for TNF-alpha cell line | Principle of the Assay: The TNF-alpha LEEporter™ Luciferase Reporter cell line is a stably transfected HEK 293 cell line which expresses Renilla luciferase reporter gene under the transcriptional control of the TNF-alpha promoter. Tumor necrosis factor-alpha (TNF-alpha) is one of the major proinflammatory cytokines and can induce systemic inflammation, apoptotic cell death, sepsis and cachexia. Dysregulation of TNF-alpha induction is often involved in various human diseases including inflammatory bowel disease, cancer and Alzheimer's disease. The TNF-alpha induction by phorbol 12-myristate 13-acetate (PMA) is shown in Figure 1. |
| Product Categories/Family for TNF-alpha cell line   | Cell Lines; Reporter Cell Lines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

NCBI AND UNIPROT INFORMATION

|                                  |                                      |
|----------------------------------|--------------------------------------|
| NCBI GI #                        | 37210                                |
| NCBI GeneID                      | 7124                                 |
| UniProt Accession #              | P01375; O43647; Q9P1Q2; Q9UIV3       |
| NCBI Official Full Name          | TNF-alpha                            |
| NCBI Official Synonym Full Names | tumor necrosis factor                |
| NCBI Official Symbol             | TNF                                  |
| NCBI Official Synonym Symbols    | DIF; TNFA; TNFSF2; TNLG1F; TNF-alpha |
| NCBI Protein Information         | tumor necrosis factor                |
| UniProt Protein Name             | Tumor necrosis factor                |
| UniProt Gene Name                | TNF                                  |
| UniProt Synonym Gene Names       | TNFA; TNFSF2; TNF-a; NTF; ICD1; ICD2 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/cell-line/tnf-alpha/78384>