Version 13-07/24

User's Manual

Human soluble Nectin-4 ELISA Kit

REF **DEIABL533**

Σ **96T**

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This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

Creative Diagnostics

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PRODUCT INFORMATION

Intended Use

The Human soluble Nectin-4 ELISA Kit is used for the quantitative measurement of the soluble form of human nectin-4 in cell culture supernatant.

General Description

Nectins are a family of type I transmembrane proteins that are involved in a Ca2+-independent immunoglobulin-like cell-cell adhesion molecules consisting of four members, Nectin-1-4. Nectin-4, also known as PVRL4, LNIR or PRR4, is expressed in the embryo and the placenta, whereas the other nectins are expressed widely in human adult tissues. The extracellular domain of nectin-4 is cleaved at the cell surface via the proteolytic activity of ADAM17/TACE, and the soluble form is released into the blood. Increased levels of the circulating form of nectin-4 have been detected in the sera of patients with metastatic breast cancer. The soluble form of nectin-4 has also been detected in significant amounts in the sera of patients with non-small cell lung cancer (NSCLC), and the up-regulation of soluble nectin-4 in the serum has been suggested to be associated with a poor prognosis for NSCLC.

Nectin-4 is overexpressed in a variety of cancers other than the above and is currently under clinical investigation as a therapeutic target. Oncolytic virotherapy is a novel treatment strategy for cancer. Vaccine and laboratory-adapted strains of measles virus (MV) uses nectin-4 and CD46 molecule as major entry receptors into cells. A recombinant measles virus which selectively uses nectin-4 receptor is used in oncolytic agents for cancer. Also anti-nectin-4 antibodies such as enfortumab (AGS-22M6E) are under clinical investigation for cancer therapies. Furthermore mutations in nectin-4 are associated with ectodermal dysplasia-syndactyly syndrome 1 (EDSS1).

Reagents And Materials Provided

Microplate: One microplate supplied ready to use, with 96 wells (12 strips of 8-wells) in a foil, zip-lock bag with a desiccant pack. Wells are pre-coated with anti-human nectin-4 monoclonal antibody as a capture antibody.

10X Wash Buffer: One bottle containing 100 mL of 10X buffer containing Tween®-20.

Sample Dilution Buffer: One bottle containing 50 mL of 1X buffer; use for standard and sample dilution. Ready to use.

Human soluble Nectin-4 Standard: One vial containing X* ng of lyophilized recombinant human soluble nectin-4.

*The amount is changed depending on lot. See the real "Datasheet" included in the kit box.

Biotinylated Detection Antibody: One vial containing 12 mL of biotinylated anti-human nectin-4 monoclonal antibody. Ready to use.

100X Streptavidin-HRP: One vial containing 120 µL of 100X HRP (horseradish peroxidase) conjugated streptavidin.

Streptavidin-HRP Dilution Buffer: One bottle containing 50 mL of 1X buffer; use for dilution of 100X

Streptavidin-HRP.

Substrate Reagent: One bottle containing 20 mL of the chromogenic substrate, tetra-methylbenzidine (TMB). Ready to use.

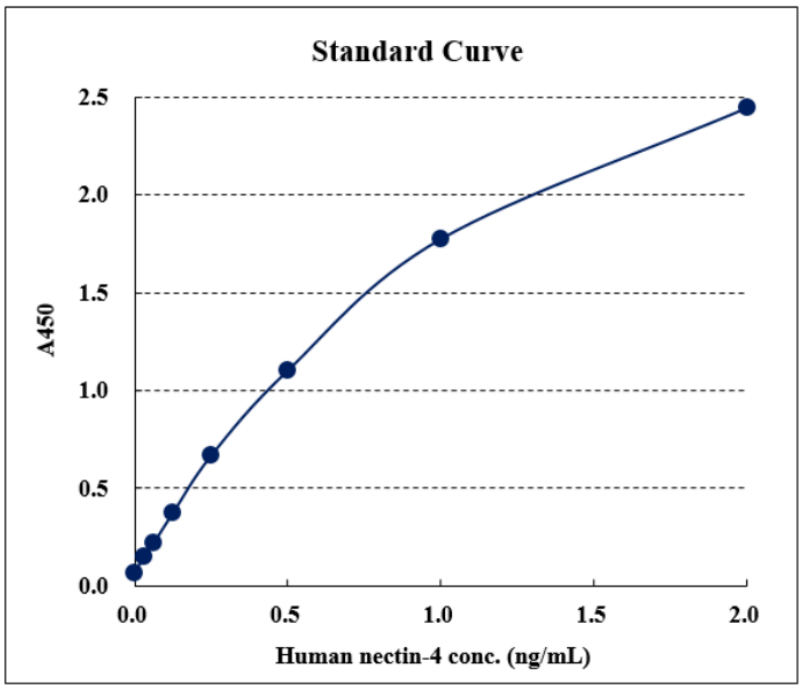
Stop Solution: One bottle containing 20 mL of 1 N H2SO4. Ready to use.

Storage

- Upon receipt store all components at 4°C.

- Don't expose reagents to excessive light.

Typical Standard Curve



Precision

Intra-assay (Within-Run, n=16) CV=3.7, 3.0, 3.8 %

Inter-assay (Run-to-Run, n=5) CV=6.5, 4.2, 6.5 %

Sensitivity

The limit of detection (defined as such a concentration of human soluble nectin-4 giving absorbance higher than mean absorbance of blank* plus three standard deviations of the absorbance of blank: A blank + 3SD blank) is better than 5.8 pg/mL of sample.