

## Physiological Adiponectin Receptor

This product is not intended use for diagnostic or medical purposes.

# **T-Cadherin**



**T-Cadherin** is a protein that binds to Adiponectin (APN), an adipocyte-secreted factor.

APN binds and accumulates in aorta, heart, skeletal muscle, and mesenchymal stem cells in systemic tissues via T-Cadherin. It is considered to promote exosome production and has a protective effect on organ tissues.

In addition, SNPs near the T-Cadherin gene are strongly associated with glucose intolerance and cardiovascular disease risk in humans.

### **T-Cadherin ELISA**

1)#27364 Human T-Cadherin(130K) ELISA Kit - IBL

Measurement Range : 0.03-2 ng/mLSensitivity : 0.01 ng/mL

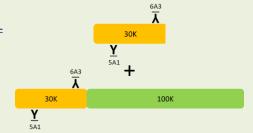
Samples : Serum, EDTA-plasma

30K 100K Y 11A2

2#27365 Human T-Cadherin(30K, 130K) ELISA Kit - IBL

Measurement Range : 0.02-1.5 ng/mLSensitivity : 0.005 ng/mL

Samples : Serum, EDTA-plasma



3#27366 Human T-Cadherin(100K, 130K) ELISA Kit - IBL

Measurement Range : 0.05-3 ng/mLSensitivity : 0.009 ng/mL

Samples : Serum, EDTA-plasma



#### [How to determine each form of T-Cadoherin]

The 30 kDa molecular species is determined by ② - ①. The 100 kDa molecular species is determined by ③ - ①.

The 130 ELISA detects only intact 130 kDa and does not detect cleaved 30 kDa and 100 kDa molecular species.

Measurements is expressed as 130 kDa recombinant equivalents.

## **Expectations as a biomarker**

Recently, it has been revealed that soluble T-Cadherin exists in human blood in three forms: 130kDa, 100kDa, and 30kDa. These three soluble forms of T-Cadherin correlate with various clinical parameters in patients with type 2 diabetes, and their concentrations change rapidly in the acute phase of myocardial infarction, so they are focused as be useful biomarkers.

In addition, soluble T-Cadherin has been found to promote the proliferation of pancreatic beta cells and inhibit the decline in insulin secretory capacity, and its function as a humoral factor is also focused.

#### References

Fukuda S, Kita S, Miyashita K, Iioka M, Murai J, Nakamura T, et al. Identification and Clinical Associations of 3 Forms of Circulating T-cadherin in Human Serum. J Clin Endocrinol Metab. 2021;106(5):1333-44.

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