Version 20-04/24

User's Manual

Human REDD1 ELISA Kit

REF **DEIABL562**

Σ **96T**

RUO

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

This Kit is used for the quantitative measurement of human REDD1 in cell lysate.

General Description

REDD1 (Regulated in Development and DNA Damage 1) is also called DNA Damage-inducible Transcript 4 Protein, HIF-1 Responsive Protein RTP801 and Dexamethasone-induced gene 2.

REDD1 is rapidly induced by a wide variety of stress conditions; arsenic, hypoxia, dexamethasone, thapsigargin, tunicamycin and heat shock and DNA damages; ionizing radiation, ultraviolet radiation, DNA alkylation. REDD1 is broadly expressed in most adult tissues, with lowest levels in brain, skeletal muscle and intestine and is upregulated in substantia nigra neurons from Parkinson disease patients as well as in alveolar septa of lungs of individuals with advanced emphysema compared with normal lungs.

REDD1 regulates cell growth, proliferation and survival via inhibition of the activity of mTORC by stabilizing the TSC1-TSC2 inhibitory complex and enhances oxidative stress-dependent cell death.

REDD1 inhibits neuronal differentiation and neurite outgrowth mediated by NGF via its effect on mTORC1 activity.

Reagents And Materials Provided

Microplate

10X Wash Buffer

Dilution Buffer

Human REDD1 Standard

HRP conjugated Detection Antibody

Substrate Reagent

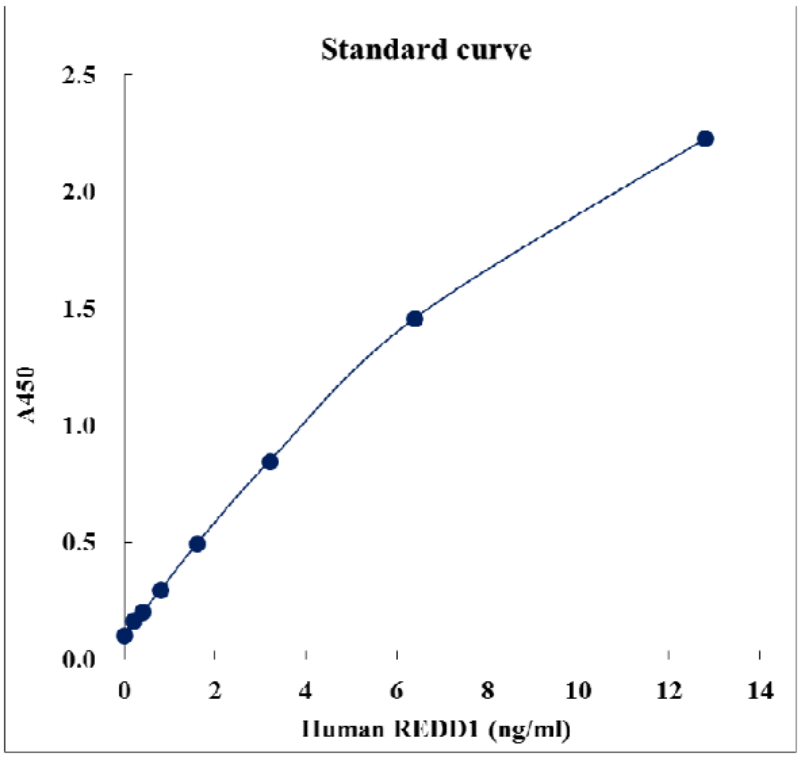
Stop Solution

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=8) CV=2.2-4.5%

Inter-assay (Run-to-Run, n=4) CV=4.3-7.8%

Sensitivity

The limit of detection (defined as such a concentration of human REDD1 giving absorbance higher than mean absorbance of blank* plus three standard deviations of the absorbance of blank: A blank + 3SD blank) is better than 85 pg/mL of sample.