

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# TfR mutant protein: A529G, recombinant (hFc Tag)

Catalog: NCP0125 Host: Human Source: 293F

#### **BackGround:**

Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes . Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second ligand, the heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake. Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway. When dietary levels of stearate (C18:0) are low, promotes activation of the JNK pathway, resulting in HUWE1-mediated ubiquitination and subsequent degradation of the mitofusin MFN2 and inhibition of mitochondrial fusion. When dietary levels of stearate (C18:0) are high, TFRC stearoylation inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2.

## **Product:**

PBS,pH7.4

#### Size:

100ug/1mg

#### **Swiss-Prot:**

P02786

# **Purification&Purity:**

The protein was purified from 293F and the purity is >

95% (by SDS-PAGE).

# **Molecular Weight:**

The protein has a calculated MW of 76 kDa.

# Storage&Stability:

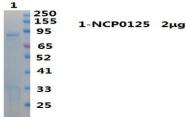
Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

## **Protein length:**

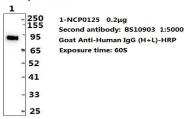
AA Leu 122 - Ile 550 (Accession # P02786)

# DATA:





# WB experiment



#### Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151