Datasheet for ABIN5564359

Neuregulin 4 Protein (NRG4) (AA 1-53) (GST tag)

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Overview

Quantity:	10 µg
Target:	Neuregulin 4 (NRG4)
Protein Characteristics:	AA 1-53
Origin:	Human, Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Neuregulin 4 protein is labelled with GST tag.
Application:	SDS-PAGE (SDS)

Product Details

Cross-Reactivity:	Human, Mouse (Murine)
Characteristics:	Mouse Neuregulin-4 (aa 1-53) is fused at the N-terminus to a GST-tag.
Purity:	>95 % (SDS-PAGE)
Endotoxin Level:	<0.01EU/µg purified protein (LAL test, Lonza).

Target Details

Target:	Neuregulin 4 (NRG4)
Alternative Name:	Neuregulin-4 (NRG4 Products)
Background:	Neuregulin-4 (Nrg4) belongs to a small family of EGF-like (EGFL) domain-containing proteins

Target Details

	that are synthesized as transmembrane precursors and undergo proteolytic cleavage. The EGF-like domain (aa 5-46) of Nrg4 (aa 1-53) directly binds to the receptors ErbB3 and 4. Nrg4 is a cold induced adipokine, highly expressed in adipose tissues and enriched in brown fat. It is increased during brown adipocyte differentiation and reduced in rodent and human obesity. It promotes neurite outgrowth and protects against diet-induced insulin resistance and hepatic steatosis through attenuating hepatic lipogenic signaling. This hepatic effect of Nrg4 is mediated by ErbB3 and ErbB4 signaling that negatively regulates de novo lipogenesis mediated by LXR and SREBP1c. This effect of Nrg4 on fatty liver and insulin resistance could lead to the development of Nrg4 as an effective therapeutic biological for the treatment of NAFLD and type 2 diabetes. GST-Nrg4 (aa 1-53) recombinant protein has been shown to mimic the effect of endogenous secreted Nrg4 on liver lipogenesis.
Molecular Weight:	~32kDa (SDS-PAGE)
UniProt:	Q9WTX4
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Binds to mouse and human receptor tyrosine-protein kinase ErbB4.
Restrictions:	For Research Use only

Handling

Format:	Solid
Concentration:	Lot specific
Buffer:	Lyophilized. Contains PBS.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Stable for at least 6 months after receipt when stored at -20°C.
Expiry Date:	6 months