

Product datasheet for TP726582

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

FNDC5 Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human/Mouse/Rat Irisin (N-6His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Asp32-Glu143

Tag: N-6His

Buffer: Lyophilized from a 0.2 um filtered solution of PBS, pH7.4.

Note: Recombinant Human/Mouse/Rat Fibronectin Type III Domain-containing Protein 5 is

produced by our Mammalian expression system and the target gene encoding Asp32-Glu143

is expressed with a 6His tag at the N-terminus.

Stability: 12 months from date of despatch

Locus ID: 252995 UniProt ID: Q8NAU1

Summary: Fibronectin type III domain-containing protein 5, the precursor of irisin, is a protein that is

encoded by the FNDC5 gene. Human Irisin is synthesized as a 212 amino acid (aa) precursor encoding a type 1 transmembrane protein with a 121 aa extracellular domain (ECD), a 21 aa transmembrane domain, and a 39 aa cytoplasmic domain. The ECD of Irisin contains a fibronectin type III domain and multiple glycosylation sites. The ECD is proteolytically cleaved to release the 112 aa soluble Irisin hormone into circulation. Mature human, mouse share 100% sequence identity. Irisin induces expression of peroxisome proliferatoractivated receptor γ coactivator 1α (PGC1α) and uncoupling protein1(UCP1), mitochondrialassociated

metabolic proteins. Irisin induces the transition of white adipose tissue into more

metabolically active beige adipose tissue. Irisin also regulates neuronal cell differentiation and

neurite outgrowth in the brain and is involved in the differentiation of osteoblasts.