

## Product datasheet for **TP727429**

### **FNDC5 Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant Human/Mouse/Rat Irisin/FNDC5 (C-6His)
<b>Species:</b>	Human
<b>Expression cDNA Clone or AA Sequence:</b>	Asp32-Glu143
<b>Tag:</b>	C-His
<b>Buffer:</b>	Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.
<b>Note:</b>	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 C-terminus.
<b>Stability:</b>	12 months from date of despatch
<b>Locus ID:</b>	252995
<b>UniProt ID:</b>	<a href="#">Q8NAU1</a>
<b>Summary:</b>	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 proliferator-activated receptor $\gamma$ coactivator 1 $\beta$ (PGC1 $\beta$ ) and uncoupling protein 1 (UCP1), mitochondrial-associated 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.



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