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## Product Datasheet

### Recombinant Human/Mouse/Rat Irisin (C-Fc) EBT-EPT075

Article Name	Recombinant Human/Mouse/Rat Irisin (C-Fc)
Biozol Catalog Number	EBT-EPT075
Supplier Catalog Number	EPT075
Alternative Catalog Number	EBT-EPT075-10
Manufacturer	ELK Biotechnology
Category	Proteine/Peptide
Product Description	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 Fc tag at the C-terminus....
Molecular Weight	Molecular weight: 39.7 KDa. Apparent molecular weight: 50-60 KDa, reducing conditions
UniProt	<a href="#">Q8NAU1</a>
Purity	Greater than 95% as determined by reducing SDS-PAGE.

Application Notes

Redissolve: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Endotoxin: Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test. Background: 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 1alpha (PGC1alpha) 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.