Recombinant Human Irisin

Catalog No: CM36

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.
Expression System	Human cells
Alternative name	Fibronectin type III domain-containing protein 5; Fibronectin type III repeat-containing protein 2; Irisin; FNDC5
Accession No.	Q8NAU1
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.
Reconstitution	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.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
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 proliferatoractivated receptor γ coactivator 1 α (PGC1 α) 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.

SDS-PAGE