For Research Use Only

COL6A3 Recombinant antibody, PBS Only (Capture)

Catalog Number:83010-1-PBS



Purification Method:

Protein A purification

CloneNo.:

230540A11

Basic Information

Catalog Number: GenBank Accession Number: 83010-1-PBS NM_004369

Concentration: GeneID (NCBI): 1 mg/ml 1293

Source: UNIPROT ID: Rabbit P12111
Isotype: Full Name:

IgG collagen, type VI, alpha 3

Immunogen Catalog Number: Calculated MW: AG34752 344 kDa

Observed MW: 300 kDa

Applications

Tested Applications:

WB, Cytometric bead array, Indirect ELISA

Species Specificity:

human

Background Information

COL6A3 belongs to the type VI collagen family. Collagen VI acts as a cell-binding protein. It is expected to be expressed in smooth muscle. And the calculated molecular weight of COL6A3 is 343 kDa. The protein has similar expression in obese and T2DM (2 patients, and it regulates the chemotaxis and inflammation of macrophages in adipose tissue. Its expression is also related to weight gain. The expression of this protein in adipocytes is related to insulin resistance, which is believed to depend on PPAR (peroxisome proliferator-activated receptor) $^{\alpha}$ -mediated adipocyte development (PMID: 25337653). Defects in COL6A3 are a cause of Bethlem myopathy (BM). Defects in COL6A3 are a cause of Ullrich congenital muscular dystrophy (UCMD) which also known as Ullrich scleroatonic muscular dystrophy. This antibody is specific to COL6A3.

Storage

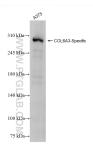
Storage:

Store at -80°C.

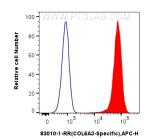
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only

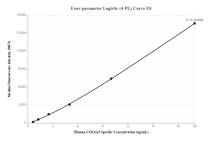
Selected Validation Data



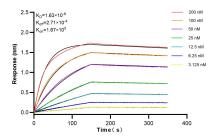
A375 cells were subjected to SDS PAGE followed by western blot with 83010-1-RR (COL6A3-Specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83010-1-PBS in a different storage buffer formulation.



1x10^6 HeLa cells were intracellularly stained with 0.25 ug COL6A3-Specific Recombinant antibody (83010-1-RR, Clone:230540A11) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83010-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00027-3, COL6A3-Specific Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83010-1-PBS. Detection antibody: 83010-4-PBS. Standard: Ag34752. Range: 0.625-20 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 83010-1-RR against Human COL6A3-Specific were performed. The affinity constant is 1.63 nM.