

Product datasheet for AM26174PU-N

OriGene Technologies, Inc.

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Caveolin-1 Mouse Monoclonal Antibody [Clone ID: 7C8]

Product data:

Product Type: Primary Antibodies

Clone Name: 7C8

Applications: IF, IP, WB

Recommended Dilution: Immunoflourescence (1,3): Reduced sample treatment and SDS-PAGE was used. The band

sizes are ~22 kDa (Caveolin-1 β) and ~25 kDa (caveolin-1 α) (Ref.1).

Immunoprecipitation (1).

Western blot (1,2).

The typical starting working dilution is 1:50. Positive control: Adipocytes (3T3-L1 adipocytes).

Reactivity: Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: GLUT4-containing vesicles immunoadsorbed from low density microsomes of rat adipocytes

(Sprague Dawley) (Ref 4)

Specificity: This antibody recognizes rat caveolin-1, a membrane protein of ~22 kDa. It recognizes

caveolin- 1α as well as caveolin- 1β , which are present in many tissues, like aorta, heart, muscle, lung, adipose white, brown and epidydimal fat. The antibody can be used to

immuno-isolate caveolae.

Formulation: PBS

State: Purified

State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide

Concentration: lot specific

Purification: Protein G

Conjugation: Unconjugated **Storage:** Store at 2 - 8 °C.

Stability: Shelf life: one year from despatch.



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Database Link: P41350

Background: Caveolae are sphingomyelin/cholesterol-rich membrane domains first discovered as

membrane invaginations on the surface of endothelial and epithelial cells. Caveolae are present in most cells, but are especially abundant in adipocytes. In addition to caveolins only two major protein components of caveolae were identified, namely the semicarbazide sensitive amine oxidase (SSAO) and the scavenger receptor CD36. Caveolin cycles between the plasma membrane and intracellular compartments via the endocytotic pathway. Caveolin is involved in the rapid intracellular transport of newly synthesized cholesterol from the ER directly to the caveolae. Caveolin plays an important role in multiple signaling pathways, molecular transport and cellular proliferation and differentiation. Caveolin binds to endothelial nitric oxide synthase leading to enzyme inhibition. Furthermore caveolin is a candidate tumor suppressor gene in many tumors. The specific functions of caveolin-

1/caveolae are highly cell and context dependent.

Synonyms: CAV1