

Adiponectin Receptor 1. Rabbit Polyclonal Antibody

Adiponectin receptor protein 1, Progesterin and adipoQ receptor family member I, ADIPOR1, PAQR1, CGI-45

BACKGROUND

Alzheimer's disease (AD) is characterized by formation of plaques of amyloid beta peptide (Abeta). Autosomally-inherited AD had been shown only in connection with coding sequence mutations. Likely transcription factors whose mutation can cause loss of function are ADR1, MIG1, and PuF, and for gain of function; E12/E47, ITF-2, and RFX2.

Adr1 controls the expression of genes required for ethanol, glycerol, and fatty acid utilization (in yeast). Adr1 can act directly on the promoters of ADH2, ACS1, GUT1, CTA1, and POT1. The yeast homolog of the AMP-activated protein kinase, Snf1, promotes Adr1 chromatin binding in the absence of glucose, and the protein phosphatase complex, Glc7.Reg1, represses its binding in the presence of glucose. A post-translational process is involved in the regulation of Adr1 binding. Chromatin binding by Adr1 is not the only step in ADH2 transcription that is regulated by glucose repression, Adr1 can bind to chromatin in repressed conditions in the presence of hyperacetylated histones. In yeast, nuclear extracts prepared from glucose-repressed and glucose-derepressed cells are equally capable of supporting miniAdr1-dependent transcription and pre-initiation complex formation.

IMMUNOGEN

Synthetic peptide near the N terminus of human Adiponectin Receptor 1 protein.

POSITIVE CONTROL/TISSUE EXPRESSION

Highly expressed in skeletal muscle. Expressed at intermediate level in brain, heart, spleen, kidney, liver, placenta, lung and peripheral blood leukocytes.

COMMENTS

Antibody can be used for Western blotting (5-10 μ g/ml) and ELISA. Optimal concentration should be evaluated by serial dilutions.

ORDERING INFORMATION

CATALOG NUMBER

X1696P

SIZE

100 μ g

FORM

Unconjugated

HOST/CLONE

Rabbit

FORMULATION

Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION

See vial for concentration

ISOTYPE

N/A

APPLICATIONS

Western Blot

SPECIES REACTIVITY

Human

ACCESSION NUMBER

Q96A54, Human

PURIFICATION

Ammonium Sulfate Precipitation

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Lahiri DK, Ge YW, Maloney B, Wavrant-De Vrieze F, Hardy J. 'Characterization of two APP gene promoter polymorphisms that appear to influence risk of late-onset Alzheimer's disease.' *Neurobiol Aging*. 2005 Nov-Dec;26(10):1329-41. Epub 2004 Dec 22.

2. Yamauchi T., Kamon J., Ito Y., Tsuchida A., Yokomizo T., Kita S., Sugiyama T., Miyagishi M., Hara K., Tsunoda M., Murakami K., Ohteki T., Uchida S., Takekawa S., Waki H., Tsuno N.H., Shibata Y., Terauchi Y., Froguel P., Kadowaki T.; Cloning of adiponectin receptors that mediate antidiabetic metabolic effects.; *Nature* 423:762-769(2003).

PRODUCT SPECIFIC REFERENCES