Human PGC1α Alexa Fluor® 532-conjugated Antibody

Antigen Affinity-purified Polyclonal Rabbit IgG
Catalog Number: AF6650X
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PGC1α when phosphorylated at S571 in Western blots.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide containing the human PGC1α S571 site.
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

PGC-1α (PPAR-γ coactivator 1; also LEM6) is a 97-120 kDa member of the PGC-1 family of proteins. It is expressed in select cell types, including brown adipocytes, skeletal muscle and hepatocytes. PGC-1α participates in both RNA processing and transcriptional coactivation in conjunction with multiple nuclear hormone receptors such as PPARγ, RAR and TR. Human PCG-1α is 798 amino acids (aa) in length. It contains an LxxLL nuclear receptor binding motif (aa 144-148), one PPAR-γ interaction domain (aa 293-339), two NLSs and an RNA binding/processing region (aa 566-710). PGC-1α activity is regulated by phosphorylation. AMPK is known to phosphorylate Thr178 and Ser539, promoting cotranscriptional activity. Conversely, Akt-mediated phosphorylation at Ser571 is reported to downregulate PGC-1α activity. This latter effect is achieved by an initial Ser571 phosphorylation, followed by GCN5 binding and subsequent PCG-1α acetylation that promotes PGC-1α dissociation from target gene promoters.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475