

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ALK-7 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant rat ALK7 is observed and no cross-reactivity with recombinant mouse Activin RIA/ALK2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 810510
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ALK-7 Leu26-Glu113 Accession # Q8NER5
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.

Immunohistochemistry 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

Activin receptor-like kinase 7 (ALK-7), also known as Activin R1C (gene name ACVR1C), is a glycosylated 58 kDa type I receptor in the superfamily of TGF-β serine/threonine kinase receptors. It associates with type II receptors to form a signaling complex that responds to the ligands Activin AB, and Activin B, GDF3, and Nodal. ALK-7 plays a role in regulating energy balance by inhibiting insulin secretion and inducing pancreatic beta cell apoptosis. It is expressed in adipose tissue but downregulated in obesity. ALK-7 is also expressed in pituitary gonadotropic cells and in pre-eclamptic placenta. It induces the apoptosis of trophoblasts as well as ovarian granulosa and epithelial cells. Within the extracellular domain, human ALK-7 shares 95% and 91% amino acid (aa) sequence identity with mouse and rat ALK-7, respectively. Alternate splicing of human ALK-7 generates additional isoforms with either a 50 aa N-terminal truncation or with deletions of 79 aa or 157 aa that encompass the transmembrane segment.

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.