RayBiotech, Inc.
3607 Parkway Lane suite 100
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Mouse Anti-Human IGF-1 Antibody

Catalog No.	Isotype/Clone:	Species:	Accession No:
130-10063	Mouse IgG1/2G12-F11	Human	3LRI_A

Description

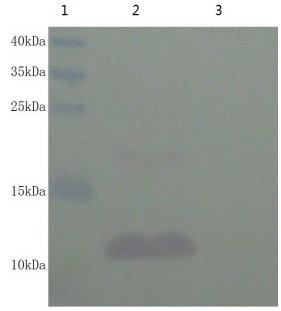
Human **Long-[arg3] Insulin like Growth Factor-1** (IGF-1), also called as IGF long R3 protein, mediates many of the growth-promoting effects of growth hormone. IGF1 also stimulates both proliferation and differentiation of myogenic precursor cells. *In vivo* IGFs are bound to one of the members of a family of six high-affinity IGF binding proteins (IGFBP 1-6) that regulate their biological activity. One of these binding proteins, IGFBP-3, affects cell proliferation via both IGF-dependent and IGF-independent mechanisms and it has generally been shown to suppress proliferation of cultured cells.

Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			6.25ng/ml
Western Blotting	*			1:2000
Immunohistology - frozen			*	
Immunohistology -paraffin			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.



Immunodetection Analysis: Representative blot from a previous lot. Lane 1, protein marker; Lane 2, recombinant protein IGF-1; Lane 3, 3T3-L-1 lysate. The membrane blot was probed with anti-IGF-1 primary antibody (1µg/ ml). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and chemiluminescence detection system.

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Preparation

Immunogen was recombinant protein derived from IGF-1. This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein G/A affinity chromatography.

Specificity

The Mouse anti-human IGF-1 antibody specifically detects targets derived from human recombinant protein at various concentrations. Cross reactivity with mouse and rat are expected from sequence similarity.

Reconstitution

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

Storage

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

Reference

1. Laajoki LG, et al. (2000) Solution structure and backbone dynamics of long-[Arg(3)]insulin-like growth factor-I. J Biol Chem. 7; 275(14):10009-15.
2. Richards RG, et al. (1998) Insulin-like growth factor-1 (IGF-1) receptor-insulin receptor substrate complexes in the uterus. Altered signaling response to estradiol in the IGF-1(m/m) mouse. J Biol Chem. 8;273(19):11962-9.
3. Valverde AM, et al. (1998) Insulin receptor substrate (IRS) proteins IRS-1 and IRS-2 differential signaling in the insulin/insulin-like growth factor-I pathways in fetal brown adipocytes. Mol Endocrinol. 12(5):688-97.