Human IGF-I Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: AF-291-NA

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IGF-I in direct ELISAs and Western blots. In direct ELISAs, approximately 35% cross-reactivity with recombinant mouse IGF-I and recombinant rat IGF-1 is observed, and less than 1% cross-reactivity with recombinant human (rh) IGF-2 and rhIGF-L1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human IGF-I
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

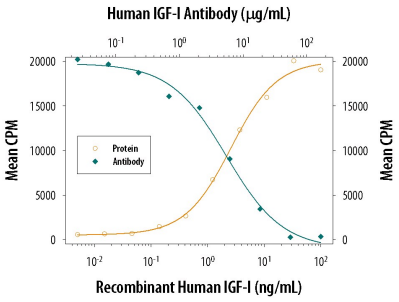
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human IGF-I (Catalog # 291-G1)
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human placenta (chorionic villi) subjected to Antigen Retrieval Reagent-Basic (Catalog # CTS013)
Neutralization	Measured by its ability to neutralize IGF-I-induced proliferation in the MCF-7 human breast cancer cell line. Karey, K.P. *et al.* (1988) Cancer Research **48**:4083. The Neutralization Dose (ND_{50}) is typically 3-12 µg/mL in the presence of 6 ng/mL Recombinant Human IGF-I.	

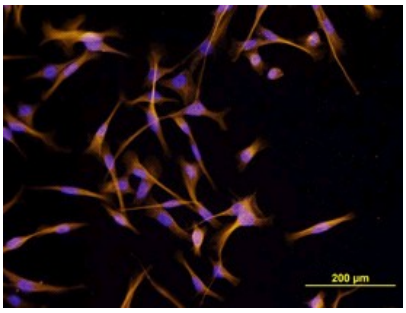
DATA

Neutralization



Cell Proliferation Induced by IGF-I and Neutralization by Human IGF-I Antibody. Recombinant Human IGF-I (Catalog # 291-G1) stimulates proliferation in the MCF-7 human breast cancer cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human IGF-I (6 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Human IGF-I Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-291-NA). The ND_{50} is typically 3-12 µg/mL.

Immunocytochemistry



IGF-I in MDA-MB-231 Human Cell Line. IGF-I was detected in immersion fixed MDA-MB-231 human breast cancer cell line using Goat Anti-Human IGF-I Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-291-NA) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

IGF-I belongs to the family of insulin-like growth factors and circulates in complex with IGF binding proteins. It is a potent mitogenic growth factor that binds the heteromeric type I and type II IGF receptors. Essentially, all of the biological activities of IGF-I are mediated by IGF-I R.