Datasheet for ABIN726575

anti-IGF1R antibody (AA 251-350)

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Overview

Quantity:	100 µL
Target:	IGF1R
Binding Specificity:	AA 251-350
Reactivity:	Human, Mouse, Rat, Dog
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IGF1R antibody is un-conjugated
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human IGF-1R alpha chain
Isotype:	IgG
Cross-Reactivity:	Dog, Human, Mouse, Rat
Predicted Reactivity:	Cow,Sheep,Pig,Horse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	IGF1R
Alternative Name:	IGF1R (IGF1R Products)
Background:	Synonyms: IGFR, CD221, IGFIR, JTK13, Insulin-like growth factor 1 receptor, Insulin-like growth

Target Details

	factor I receptor, IGF-I receptor, IGF1R Background: When present in a hybrid receptor with INSR, binds IGF1. PubMed:12138094 shows that hybrid receptors composed of IGF1R and INSR isoform Long are activated with a high affinity by IGF1, with low affinity by IGF2 and not significantly activated by insulin, and that hybrid receptors composed of IGF1R and INSR isoform Short are activated by IGF1, IGF2 and insulin. In contrast, PubMed:16831875 shows that hybrid receptors composed of IGF1R and INSR isoform Long and hybrid receptors composed of IGF1R and INSR isoform Short have similar binding characteristics, both bind IGF1 and have a low affinity for insulin.
Gene ID:	3480
UniProt:	P08069
Pathways:	RTK Signaling, Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Autophagy

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200
	ICC 1:100-500

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

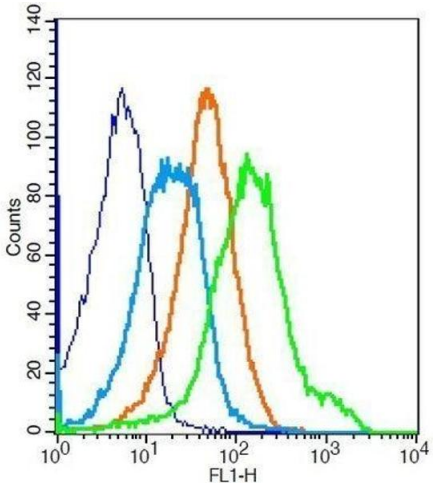
Handling

Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

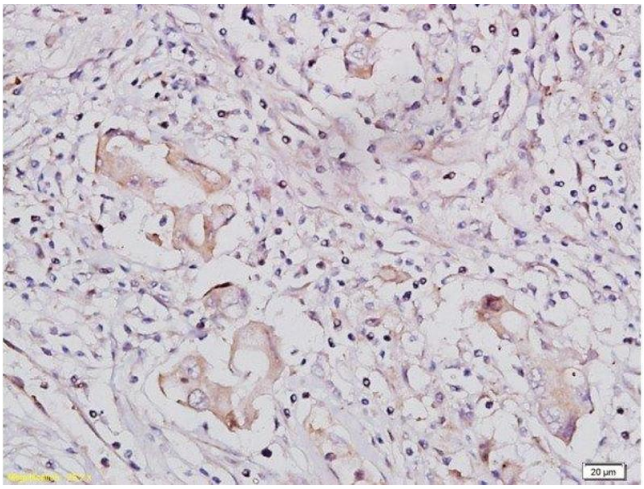
Product cited in:	Hu, Li, Hu, Wu, Li, Meng: "MicroRNA let-7a and let-7f as novel regulatory factors of the sika deer (Cervus nippon) IGF-1R gene." in: **Growth factors (Chur, Switzerland)**, Vol. 32, Issue 1, pp. 27-33 , (2014) (PubMed). Yang, Liu, Li, Wen, Zhu, Xu: "Insulin-Like Growth Factor-1 Modulates Polycomb Cbx8 Expression and Inhibits Colon Cancer Cell Apoptosis." in: **Cell biochemistry and biophysics**, (2014) (PubMed).

Images



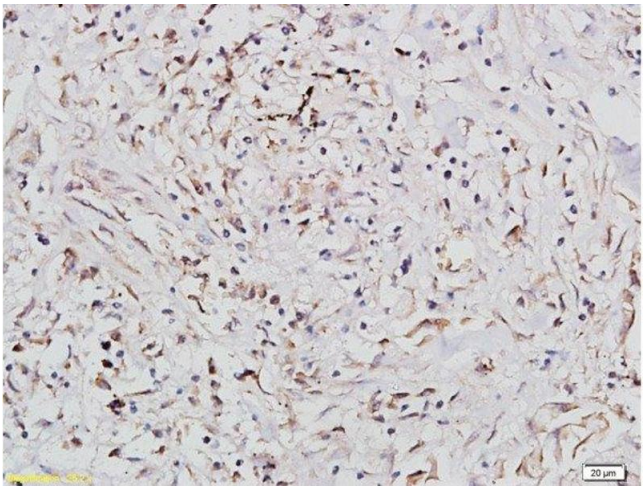
Flow Cytometry

Image 1. Mouse splenocytes probed with Rabbit Anti-IGF1R Polyclonal Antibody .



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin-embedded human lung carcinoma tissue labeled with Rabbit Anti-IGF1R/CD221 Polyclonal Antibody, Unconjugated at 1:300 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin embedded: human lung carcinoma labeled with Anti-IGF1R/CD221 Polyclonal Antibody, Unconjugated at 1:300, followed by conjugation to the secondary antibody and DAB staining

Validation report #029750 for Western Blotting (WB)

Successfully validated (Western Blotting (WB))

by Alamo Laboratories Inc

Report Number: 029750

Date: Jul 01 2014

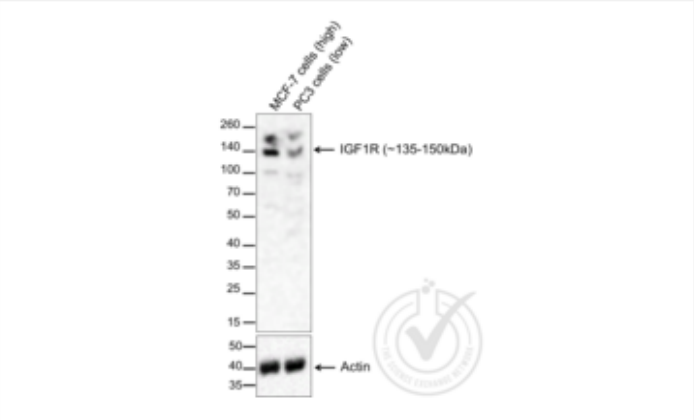
Lot Number:	130322
Method validated:	Western Blotting (WB)
Positive Control:	MCF-7 cells – high expression
Negative Control:	PC3 cells – low expression
Notes:	Two strong bands were observed in the positive control, one at the expected molecular weight, and one slightly higher (which may represent a glycosylated or precursor form). Weaker bands of the same molecular weight appear in the negative control, which is consistent with the expected lower expression in PC3 cells. No other major bands are present in either positive or negative controls.
Primary Antibody:	- Antigen: Insulin-Like Growth Factor 1 Receptor (IGF1R) (1:200 dilution) - Catalog number: ABIN726575 - Supplier: Bioss - Supplier catalog number: bs-0227R - Lot number: 130322
Secondary Antibody:	- Antibody: Goat Anti-Rabbit IgG (H + L)-HRP Conjugate (1:20,000 dilution) - Supplier: Bio-Rad - Catalog number: #170-6515 - Lot number: L170-6515
Controls:	• Positive control: MCF-7 cell extract • Negative control: PC-3 cell extract
Protocol:	• Total protein extracts were boiled in 1X SDS Sample Buffer containing 1% SDS and 1.25% β-mercaptoethanol at 95°C for 5 min prior to loading. • 46 µg of boiled extracts were loaded and resolved on a 8-16% SDS-polyacrylamide gel. • The Spectra Multicolor Broad Range (Thermo Scientific, Cat # 26634) were used as molecular mass markers. • Proteins were transferred onto PVDF membrane by wet transfer and protein transfer was confirmed with Ponceau-S staining. • The PVDF membrane was incubated with 25 mL of blocking buffer [Tris Buffered Saline, pH 7.4 plus 0.1% TW20 (TBST)] containing 5% (W/V) non-fat dry milk at room temperature for 1 h. • The membrane was rinsed with TBST once. • The membrane was immersed with the protein side up in the primary antibody solution (anti-IGF1R; 1:200) in TBST containing 5% (W/V) non-fat dry milk and incubated for 16 hours at

4°C.

- The membrane was rinsed in TBST three times for 5 min each.
- The membrane was incubated in the HRP-conjugated secondary antibody solution (Goat anti-rabbit IgG-HRP; 1:20,000) in TBST containing 5% (W/V) non-fat dry milk and incubated for 1 hour at room temperature (~26°C) with gentle agitation.
- The membrane was rinsed three times with TBST for 5 min each.
- The membrane was rinsed in TBS twice for 30 s each.
- Signals were detected with ECL-2 Substrate. The blot was scanned for 300 s.
- The membrane was rinsed three times with TBST, then incubated in Acidic Glycine Stripping Buffer at room temperature with gentle agitation for 3 times, 10 min each.
- The membrane was washed in TBST 2 times for 10 min each.
- Repeated Steps 5-12 with the loading control antibody (anti-Actin; 1:6,000) and its matching secondary antibody (Goat anti-rabbit IgG-HRP; 1:20,000).

Experimental Notes: - No challenges noted.

Image for Validation report #029750



Validation image no. 1 for anti-Insulin-Like Growth Factor 1 Receptor (IGF1R) (AA 251-350) antibody (ABIN726575)

Figure 1. Western blot of lysates from MCF7 cells (Lane 1) and PC-3 cells (Lane 2) probed with anti-IGF1R (upper panel) or with anti-Actin for loading control (lower panel).