Datasheet for ABIN129622

anti-EGR1 antibody (AA 85-115)

2 Images | 2 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	EGR1
Binding Specificity:	AA 85-115
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	EGR-1 Antibody
Immunogen:	Immunogen: This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 85-115 of Human EGR-1. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This affinity purified antibody is directed against human EGR-1 protein.
Characteristics:	Synonyms: rabbit anti-EGR-1 Antibody, EGR1, EGR 1, AT225 antibody, Early growth response 1 antibody, KROX24 antibody, Nerve growth factor-induced protein A antibody, NGFI-A, Transcription factor ETR103, Transcription factor Zif268, ZNF225, Zinc finger protein 225, Zinc finger protein Krox-24
Purification:	The product was affinity purified from monospecific antiserum by immunoaffinity purification.

Product Details

Sterility:	Sterile filtered

Target Details

Target:	EGR1
Alternative Name:	EGR1 (EGR1 Products)
Background:	Background: EGR-1 (also called Early Growth Response protein 1, Krox-24 protein, ZIF268, Nerve growth factor-induced protein A or NGFI-A, Transcription factor ETR103, and Zinc finger protein 225 or AT225) is a transcriptional regulator that recognizes and binds to the DNA sequence 5'-CGCCCCCGC-3' (EGR-site). EGR-1 activates the transcription of target genes whose products are required for mitogenesis and differentiation. EGR-1 is a nuclear protein induced by growth factors. Expression has been identified in a variety of cancers.
Gene ID:	1958
NCBI Accession:	NP_001955
UniProt:	P18146
Pathways:	Regulation of Carbohydrate Metabolic Process, Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Application Notes:	Immunohistochemistry Dilution: 2 µg/mL to 20 µg/mL Application Note: This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~58 kDa in size corresponding to EGR-1 by western blotting in the appropriate cell lysate or extract. Western Blot Dilution: 1:500 - 1:3,000 ELISA Dilution: 1:4,000 - 1:16,000 Other: User Optimized
Restrictions:	For Research Use only

Handling

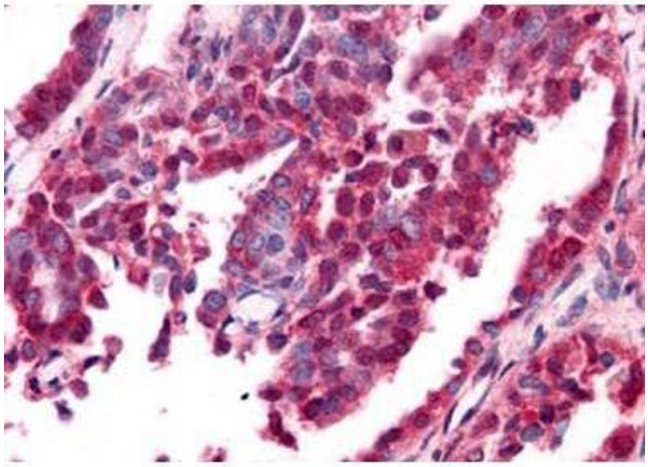
Format:	Liquid
Concentration:	0.93 mg/mL

Handling

Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

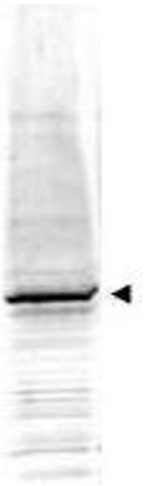
Publications

Product cited in:	Weaver, Hellstrom, Brown, Andrews, Dymov, Diorio, Zhang, Szyf, Meaney: "The methylated-DNA binding protein MBD2 enhances NGFI-A (egr-1)-mediated transcriptional activation of the glucocorticoid receptor." in: **Philosophical transactions of the Royal Society of London. Series B, Biological sciences**, Vol. 369, Issue 1652, (2015) (PubMed). Hellstrom, Dhir, Diorio, Meaney: "Maternal licking regulates hippocampal glucocorticoid receptor transcription through a thyroid hormone-serotonin-NGFI-A signalling cascade." in: **Philosophical transactions of the Royal Society of London. Series B, Biological sciences**, Vol. 367, Issue 1601, pp. 2495-510, (2012) (PubMed).



Immunohistochemistry

Image 1. Affinity Purified anti-EGR-1 antibody was used at a 10 ug/ml to detect nuclear and cytoplasmic signal with low background staining in a variety of tissues including multi-human, multi-brain and multi-cancer slides. Within the multi-tumor block, the antibody showed variable levels of nuclear and cytoplasmic staining between individual tumors, with some tumors showing moderate staining. This image shows EGR-1 staining of human ovarian carcinoma. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.



Western Blotting

Image 2. Western blot using Affinity Purified anti-EGR-1 antibody shows detection of a predominant band at ~58 kDa correspond-ing to EGR-1 present in mouse embryonic fibroblast whole cell lysate (arrowhead). Approximately 35 µg of lysate was separated by 4-20% SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,500. Reaction occurred 2h at room temp-erature followed by washes and reaction with a 1:10,000 dilution of800 conjugated Gt-a-Rabbit IgG [H&L] MX for 45 min at room temperature.800 fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.