# abcam

## Product datasheet

## Anti-NRG1 antibody [7D5] ab2369

### 画像数1

#### 製品の概要

製品名 Anti-NRG1 antibody [7D5]

製品の詳細 Mouse monoclonal [7D5] to NRG1

由来種 Mouse

アプリケーション 適用あり: IHC-P, IHC-Fr

種交差性 交差種: Mouse, Rat

免疫原 Recombinant extracellular domain of rat NRG1 (Neuregulin 1) protein.

ポジティブ・コントロール Prostate carcinoma

特記事項

NRG1 (Neuregulin 1) binds to e-erbB3 and c-erbB4 receptors on mammary and neuronal cells with low and high affinity, respectively. NRG1 exists in several isoforms, which are classified in two groups, a and b, that differ in their EGF-like domain and in receptor binding affinity. This antibody detects pan-NRG1 and is not subtype specific.

Abcam is committed to meeting high standards of ethical manufacturing and has decided to discontinue this product by June 2019 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause.

## 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

ארע"ד Preservative: 0.05% Sodium Azide

Constituents: 1% BSA

精製度 IgG fraction

一次抗体 備考 NRG1 (Neuregulin 1) binds to e-erbB3 and c-erbB4 receptors on mammary and neuronal cells

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antibody detects pan-NRG1 and is not subtype specific.

**ポリ/モノ** モノクローナル

**クローン名** 7D5

₹II-マ unknown

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軽鎖の種類

unknown

#### アプリケーション

Our Abpromise guarantee covers the use of ab2369 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. ABC method.
IHC-Fr		1/50 - 1/100. ABC method.

#### ターゲット情報

#### 機能

Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. Concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. The multiple isoforms perform diverse functions such as inducing growth and differentiation of epithelial, glial, neuronal, and skeletal muscle cells; inducing expression of acetylcholine receptor in synaptic vesicles during the formation of the neuromuscular junction; stimulating lobuloalveolar budding and milk production in the mammary gland and inducing differentiation of mammary tumor cells; stimulating Schwann cell proliferation; implication in the development of the myocardium such as trabeculation of the developing heart. Isoform 10 may play a role in motor and sensory neuron development.

#### 組織特異性

Type I isoforms are the predominant forms expressed in the endocardium. Isoform alpha is expressed in breast, ovary, testis, prostate, heart, skeletal muscle, lung, placenta liver, kidney, salivary gland, small intestine and brain, but not in uterus, stomach, pancreas, and spleen. Isoform 3 is the predominant form in mesenchymal cells and in non-neuronal organs, whereas isoform 6 is the major neuronal form. Isoform 8 is expressed in spinal cord and brain. Isoform 9 is the major form in skeletal muscle cells; in the nervous system it is expressed in spinal cord and brain. Also detected in adult heart, placenta, lung, liver, kidney, and pancreas. Isoform 10 is expressed in nervous system: spinal cord motor neurons, dorsal root ganglion neurons, and brain. Predominant isoform expressed in sensory and motor neurons. Not detected in adult heart, placenta, lung, liver, skeletal muscle, kidney, and pancreas. Not expressed in fetal lung, liver and kidney. Type IV isoforms are brain-specific.

#### 関連疾患

Note=A chromosomal aberration involving NRG1 produces gamma-heregulin. Translocation t(8;11) with ODZ4. The translocation fuses the 5'-end of ODZ4 to NRG1 (isoform 8). The product of this translocation was first thought to be an alternatively spliced isoform. Gamma-heregulin is a soluble activating ligand for the ERBB2-ERBB3 receptor complex and acts as an autocrine growth factor in a specific breast cancer cell line (MDA-MB-175). Not detected in breast carcinoma samples, including ductal, lobular, medullary, and mucinous histological types, neither in other breast cancer cell lines.

#### 配列類似性

Belongs to the neuregulin family.

Contains 1 EGF-like domain.

Contains 1 lg-like C2-type (immunoglobulin-like) domain.

**発生段階** Detectable at early embryonic ages. Isoform 10 is highly expressed in developing spinal motor

neurons and in developing cranial nerve nuclei. Expression is maintained only in both adult motor

neurons and dorsal root ganglion neurons. Type IV isoforms are expressed in fetal brain.

ドメイン The cytoplasmic domain may be involved in the regulation of trafficking and proteolytic

processing. Regulation of the proteolytic processing involves initial intracellular domain

dimerization.

ERBB receptor binding is elicited entirely by the EGF-like domain.

翻訳後修飾 Proteolytic cleavage close to the plasma membrane on the external face leads to the release of

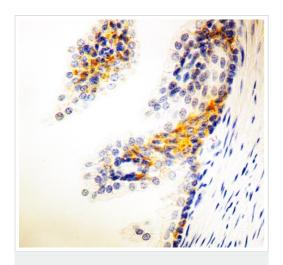
the soluble growth factor form.

N- and O-glycosylated. Extensive glycosylation precedes the proteolytic cleavage.

細胞内局在 Secreted; Cell membrane. Does not seem to be active; Membrane. May possess an internal

uncleaved signal sequence; Nucleus. May be nuclear and Secreted. Has a signal peptide.

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NRG1 antibody [7D5] (ab2369)

Immunohistochemical analysis of formalinfixed, paraffin-embedded Human prostate carcinoma tissue, staining NRG1 with ab2369.

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