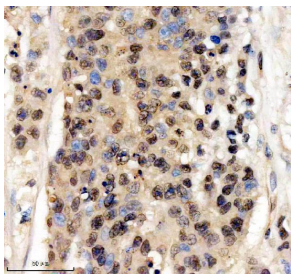
EGR3 Antibody / Early growth response protein 3 Antibody (FY13522)

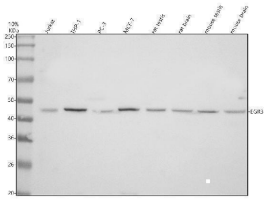
Catalog No.	Formulation	Size
FY13522	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

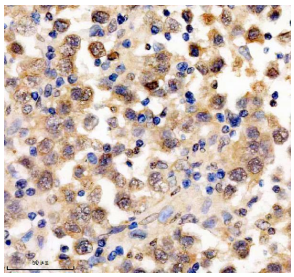
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q06889
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This EGR3 Antibody / Early growth response protein 3 Antibody is intended for research use only.



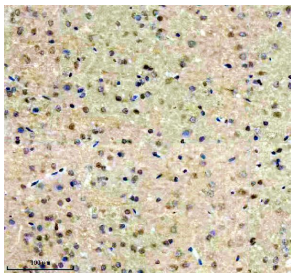
EGR3 Antibody by IHC in human colon carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human colon carcinoma using Early growth response protein 3 Antibody shows brown immunoreactivity in numerous tumor cells, with staining visible in nuclear and perinuclear regions. Hematoxylin counterstaining identifies nuclei and tissue architecture. Sections underwent heat-mediated antigen retrieval in EDTA buffer, pH 8.0, followed by incubation with primary antibody at 2 ug/mL overnight at 4oC. HRP-based detection with DAB produced the brown reaction product. This field demonstrates EGR3 immunoreactivity in a densely cellular tumor region.



EGR3 Antibody by WB across human and rodent samples. Western blot analysis with Early growth response protein 3 Antibody shows a major band near 43 kDa in human Jurkat (lane 1), THP-1 (lane 2), PC-3 (lane 3), and MCF-7 (lane 4) cell lysates, rat testis (lane 5), rat brain (lane 6), mouse testis (lane 7), and mouse brain (lane 8). The observed migration is consistent with the approximately 43 kDa calculated molecular weight of EGR3. Samples contained 30 ug of reduced protein per lane, resolved by 10% SDS-PAGE. Primary antibody incubation was performed at 0.5 ug/mL overnight at 4oC before chemiluminescent detection.



EGR3 Antibody by IHC in human testicular carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human testicular carcinoma using Early growth response protein 3 Antibody reveals variable brown staining in tumor cells, including conspicuous nuclear-associated and cytoplasmic signal in parts of the field. Blue hematoxylin counterstaining distinguishes cell nuclei from the DAB reaction product. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0, followed by overnight incubation with primary antibody at 2 ug/mL at 4oC. This section provides an additional tumor-tissue example of EGR3 immunoreactivity.



EGR3 Antibody by IHC in rat brain. Immunohistochemistry of formalin-fixed, paraffin-embedded rat brain using Early growth response protein 3 Antibody shows scattered brown-positive cells against a comparatively lightly stained neural tissue background. Hematoxylin counterstaining highlights nuclei throughout the section. Antigen retrieval was performed in EDTA buffer, pH 8.0, and sections were incubated with primary antibody at 2 ug/mL overnight at 4oC, followed by HRP/DAB detection. The heterogeneous staining pattern illustrates EGR3 immunoreactivity in selected cells within the examined brain region.

Description

EGR3 Antibody / Early growth response protein 3 Antibody detects EGR3, a zinc-finger transcription factor that helps translate transient extracellular signals into changes in gene expression. As a member of the early growth response family, EGR3 can be induced by signaling events associated with neuronal activity, growth factors, and other stimuli. The protein binds regulatory DNA sequences and influences transcriptional programs that shape cellular differentiation and adaptive responses. Its expression is often dynamic, making timing and signaling context central to understanding its biological role.

In the nervous system, EGR3 contributes to activity-dependent gene regulation and has been implicated in synaptic plasticity and neuronal adaptation. It also has a recognized role in the development of muscle spindles, the specialized sensory structures that provide information about muscle stretch and body position. Through transcriptional regulation, EGR3 helps coordinate aspects of sensory organ maturation and the response to neural signals. The effects of EGR3 are influenced by its target genes and by interactions with other transcriptional regulators. The Early growth response protein 3 Antibody designation reflects the full protein name associated with the EGR3 target.

EGR3 has additionally been investigated in immune-cell signaling and differentiation, reflecting the broad capacity of immediate-early transcription factors to respond to changing cellular conditions. Associations between altered EGR3 regulation and neurological or other disorders remain areas of ongoing research and should not be interpreted as a single uniform mechanism. The distinction between EGR3 and related family members such as EGR1 and EGR2 is important because overlapping DNA-binding properties do not imply identical physiological functions. NSJ Bioreagents offers the EGR3 Antibody for this transcriptional regulator. An EGR3 Antibody relates to the study of stimulus-dependent gene expression, neuronal development, and sensory system maturation.

Explore related research targets in our Signal Transduction Antibodies for Cell Signaling and Regulatory Pathway Research collection.

Application Notes

For best results, determine the optimal working dilution of the EGR3 Antibody / Early growth response protein 3 Antibody experimentally.

Immunogen

The EGR3 Antibody was generated using a synthetic peptide corresponding to a sequence in the middle region of human EGR3.

Storage

After reconstitution, the EGR3 Antibody may be stored at 4oC for up to one month. For longer storage, aliquot and freeze at -20oC for up to six months. Avoid repeated freezing and thawing.

Alternate Names

EGR3 antibody, Early growth response protein 3 antibody, early growth response 3 antibody, PILOT antibody, EGR-3 antibody, Zinc finger protein pilot antibody

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