



## Rabbit Anti-EGR2 antibody

SL8368R

<b>Product Name:</b>	EGR2
<b>Chinese Name:</b>	早期生长反应蛋白2抗体
<b>Alias:</b>	CMT1D; CMT4E; DKFZp686J1957; Early growth response 2; Early growth response protein 2; EGR-2; egr2; EGR2_HUMAN; FLJ14547; KROX 20 Drosophila homolog; Krox 20 homolog Drosophila; KROX20; Krox20 protein; Zinc finger protein Krox-20; AT591.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	50kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human EGR2:351-450/476
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Egr proteins function in transcription regulatory activities surrounding cellular growth, differentiation and function. The deduced amino acid sequences of human Egr-2 and mouse Egr-1 are 92% identical in the zinc finger region but show no homology elsewhere. Egr-2 is a sequence-specific DNA-binding transcription factor that binds two

specific DNA sites located in the promoter region of HoxA4 and localizes to the nucleus. Defects in the Egr-2 protein are a cause of congenital hypomyelination neuropathy (CHN). CHN is characterized clinically by early onset of hypotonia, areflexia, distal muscle weakness and very slow nerve conduction velocities. Mutations in the gene that encodes Egr-2 (EGR2) also cause Dejerine-Sottas syndrome (DSS), which is also known as Dejerine-Sottas neuropathy (DSN) or hereditary motor and sensory neuropathy III (HMSN3). DSS patients exhibit severe early onset motor and sensory neuropathy with very slow nerve conduction velocities and elevated cerebrospinal fluid protein concentrations.

**Function:**

Sequence-specific DNA-binding transcription factor. Binds to two specific DNA sites located in the promoter region of HOXA4.

E3 SUMO-protein ligase helping SUMO1 conjugation to its coregulators NAB1 and NAB2, whose sumoylation down-regulates EGR2 own transcriptional activity.

**Subunit:**

Interacts with HCFC1. Interacts with WWP2. Interacts with UBC9.

**Subcellular Location:**

Nucleus.

**Post-translational modifications:**

Ubiquitinated by WWP2 leading to proteasomal degradation (By similarity).

**DISEASE:**

Defects in EGR2 are a cause of congenital hypomyelination neuropathy (CHN) [MIM:605253]. Inheritance can be autosomal dominant or recessive. Recessive CHN is also known as Charcot-Marie-Tooth disease type 4E (CMT4E). CHN is characterized clinically by early onset of hypotonia, areflexia, distal muscle weakness, and very slow nerve conduction velocities.

Defects in EGR2 are a cause of Charcot-Marie-Tooth disease type 1D (CMT1D) [MIM:607678]. CMT1D is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT1 group are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet.

Defects in EGR2 are a cause of Dejerine-Sottas syndrome (DSS) [MIM:145900]; also known as Dejerine-Sottas neuropathy (DSN) or hereditary motor and sensory neuropathy III (HMSN3). DSS is a severe degenerating neuropathy of the demyelinating Charcot-Marie-Tooth disease category, with onset by age 2 years. DSS is characterized by motor and sensory neuropathy with very slow nerve conduction velocities, increased

cerebrospinal fluid protein concentrations, hypertrophic nerve changes, delayed age of walking as well as areflexia. There are both autosomal dominant and autosomal recessive forms of Dejerine-Sottas syndrome.

**Similarity:**

Belongs to the EGR C2H2-type zinc-finger protein family.  
Contains 3 C2H2-type zinc fingers.

**SWISS:**

P11161

**Gene ID:**

1959

**Database links:**

[Entrez Gene: 1959](#)Human

[Entrez Gene: 13654](#)Mouse

[Entrez Gene: 114090](#)Rat

[GenBank: BC035625](#)Human

[Omim: 129010](#)Human

[SwissProt: P11161](#)Human

[SwissProt: P08152](#)Mouse

[SwissProt: P51774](#)Rat

[Unigene: 1395](#)Human

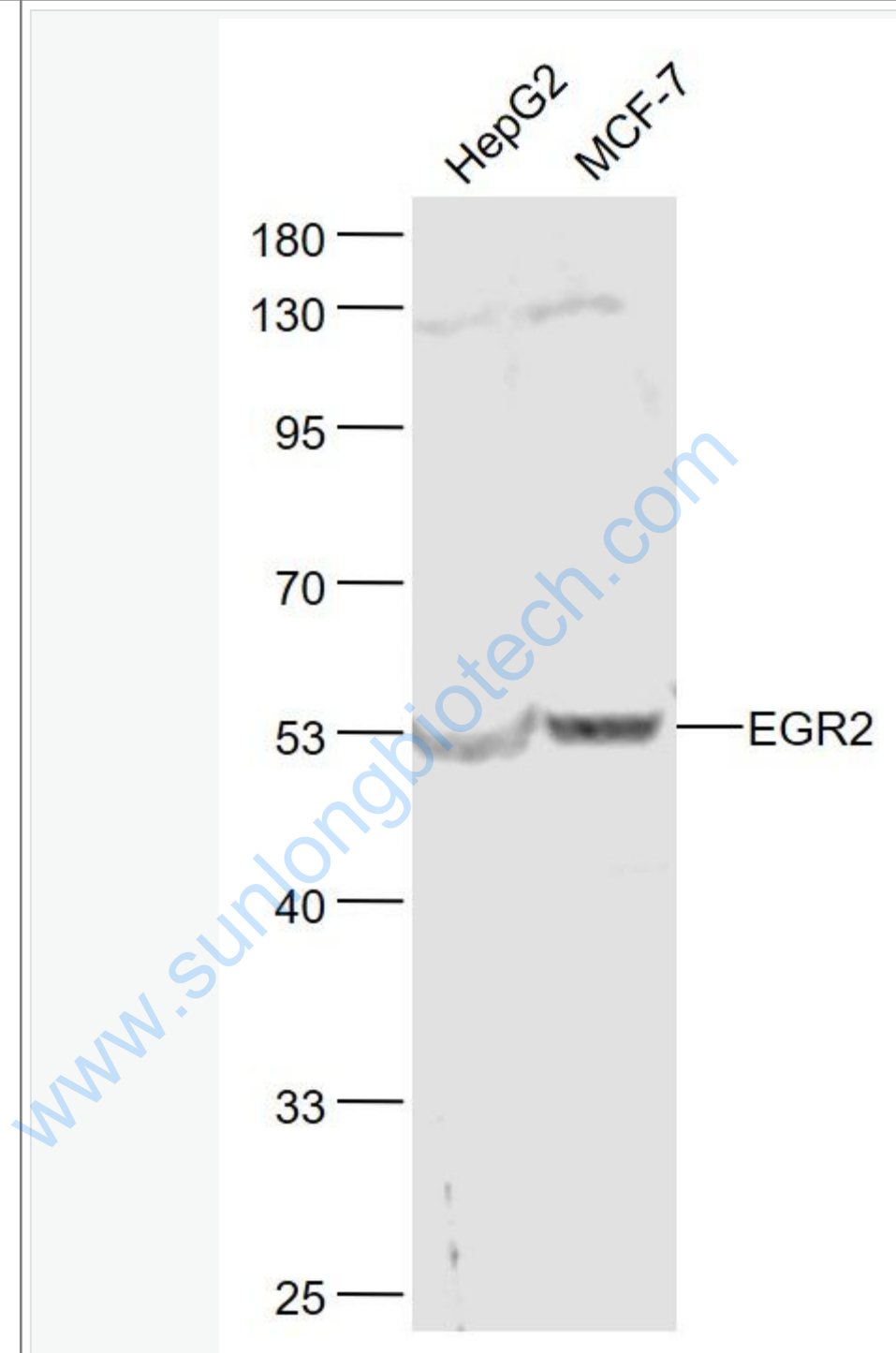
[Unigene: 290421](#)Mouse

[Unigene: 89235](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

HepG2(Human) Cell Lysate at 30 ug

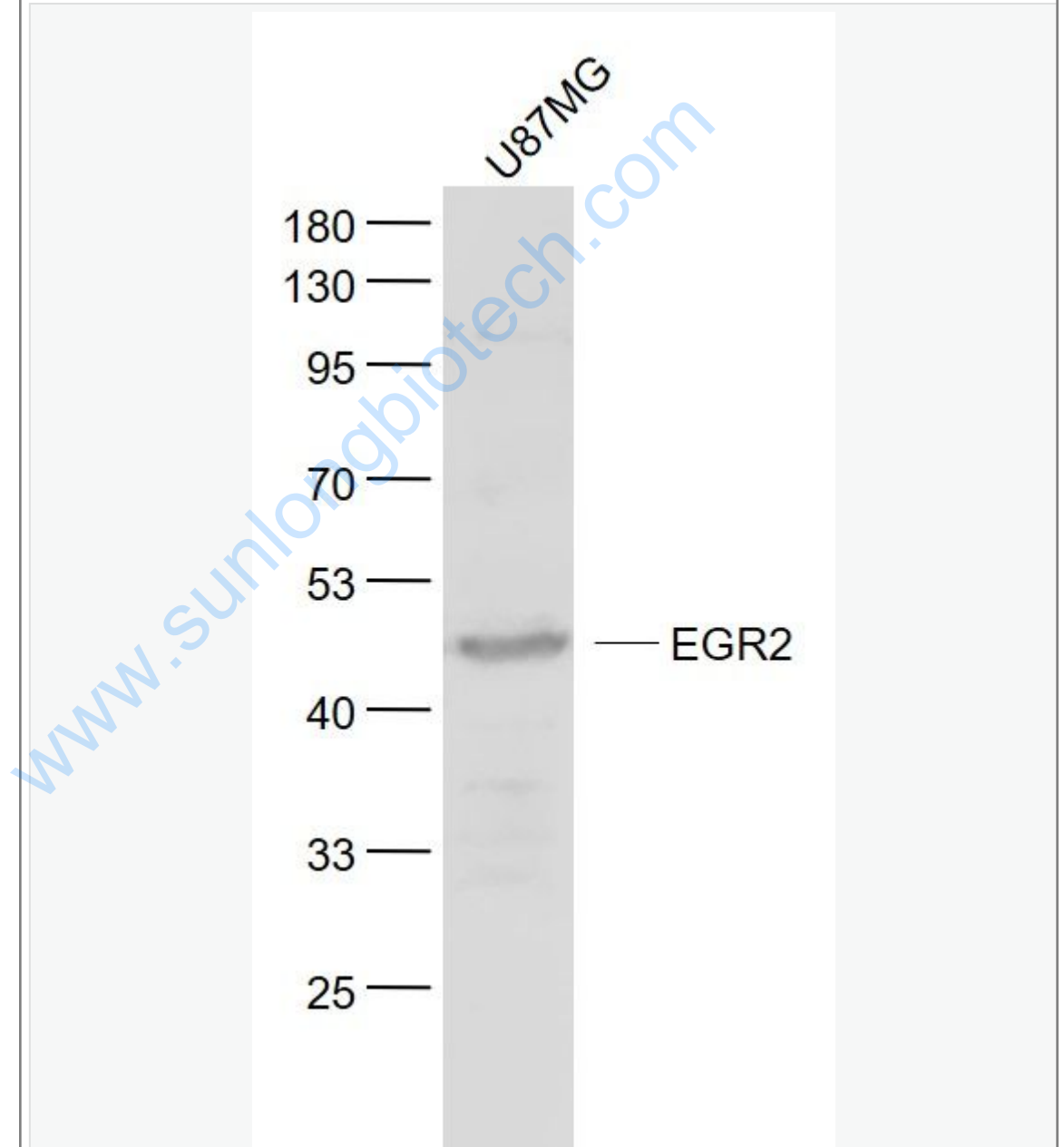
MCF-7(Human) Cell Lysate at 30 ug

Primary: Anti- EGR2 (SL8368R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50 kD

Observed band size: 52 kD



Sample:

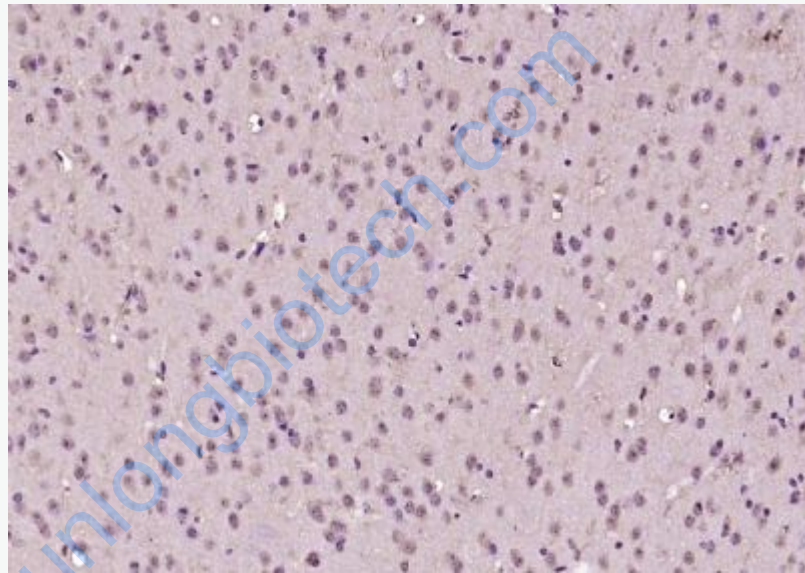
U87mg (Mouse) Lysate at 40 ug

Primary: Anti- EGR2 (SL8368R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50 kD

Observed band size: 50 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EGR2) Polyclonal Antibody, Unconjugated (SL8368R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.