

EURL (G-4): sc-390816

BACKGROUND

First isolated in *Gallus gallus* retina and lens, EURL (early undifferentiated retina and lens), also known as C21orf91 of YG81, is a 297 amino acid protein that contains a putative carboxy-terminal coiled-coil domain. With highest expression in embryonic dorsal retina and, during later embryonic stages, the anterior epithelial cells of the lens, it is suspected that EURL may play a role in cell determination and differentiation. The gene encoding EURL maps to the long arm of chromosome 21, which houses approximately 300 genes and comprises nearly 1.5% of the human genome. Chromosome 21-associated disorders include Alzheimer's Disease, amyotrophic lateral sclerosis and, most notably, Down Syndrome (also known as trisomy 21).

REFERENCES

1. Yancey, S.B., et al. 1992. Spatial and temporal patterns of distribution of the gap junction protein connexin43 during mouse gastrulation and organogenesis. *Development* 114: 203-212.
2. Wen, Y., et al. 1995. Lens epithelial cell mRNA, II. Expression of a mRNA encoding a lipid-binding protein in rat lens epithelial cells. *Gene* 158: 269-274.
3. Mishima, N., et al. 1998. Chicken Eyes absent 2 gene: isolation and expression pattern during development. *Int. J. Dev. Biol.* 42: 1109-1115.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 190685. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Godbout, R., et al. 2003. Isolation of a novel cDNA enriched in the undifferentiated chick retina and lens. *Dev. Dyn.* 227: 409-415.
6. Levine, S., et al. 2008. Systemic pathology in aged mouse models of Down's syndrome and Alzheimer's disease. *Exp. Mol. Pathol.* 86: 18-22.

CHROMOSOMAL LOCATION

Genetic locus: C21orf91 (human) mapping to 21q21.1.

SOURCE

EURL (G-4) is a mouse monoclonal antibody raised against amino acids 1-297 representing full length EURL of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EURL (G-4) is available conjugated to agarose (sc-390816 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390816 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390816 PE), fluorescein (sc-390816 FITC), Alexa Fluor® 488 (sc-390816 AF488), Alexa Fluor® 546 (sc-390816 AF546), Alexa Fluor® 594 (sc-390816 AF594) or Alexa Fluor® 647 (sc-390816 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390816 AF680) or Alexa Fluor® 790 (sc-390816 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

EURL (G-4) is recommended for detection of EURL of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EURL siRNA (h): sc-91525, EURL shRNA Plasmid (h): sc-91525-SH and EURL shRNA (h) Lentiviral Particles: sc-91525-V.

Molecular Weight of EURL: 34 kDa.

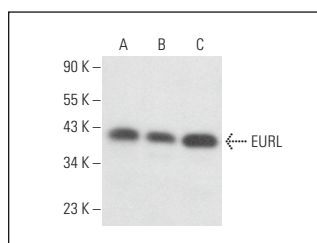
Positive Controls: A-431 nuclear extract: sc-2122, CCRF-CEM cell lysate: sc-2225 or Y79 cell lysate: sc-2240.

RECOMMENDED SUPPORT REAGENTS

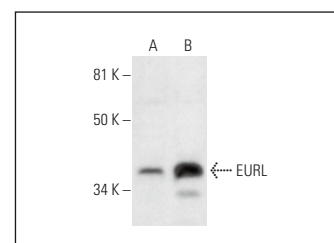
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



EURL (G-4): sc-390816. Western blot analysis of EURL expression in Y79 (A), CCRF-CEM (B) and SUP-T1 (C) whole cell lysates.



EURL (G-4): sc-390816. Western blot analysis of EURL expression in A-431 nuclear extract (A) and Y79 whole cell lysate (B).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.