

EFR3A (E-14): sc-87786

BACKGROUND

EFR3A (protein EFR3 homolog A), also known as KIAA0143, is a plasma membrane protein that contains 821 amino acids and belongs to the EFR3 family. EFR3A is alternatively spliced creating three isoforms and is encoded by a gene that maps to human chromosome 8. Human chromosome 8 consists of nearly 146 million base pairs, encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

- Nagase, T., et al. 1995. Prediction of the coding sequences of unidentified human genes. IV. The coding sequences of 40 new genes (KIAA0121-KIAA0160) deduced by analysis of cDNA clones from human cell line KG-1. *DNA Res.* 2: 167-174, 199-210.
- Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
- Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
- Mossafa, H., et al. 2006. Non-Hodgkin's lymphomas with Burkitt-like cells are associated with c-Myc amplification and poor prognosis. *Leuk. Lymphoma* 47: 1885-1893.
- Agrelo, R., et al. 2006. Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. *Proc. Natl. Acad. Sci. USA* 103: 8822-8827.
- Bechtel, S., et al. 2007. The full-ORF clone resource of the German cDNA Consortium. *BMC Genomics* 8: 399.
- Cantin, G.T., et al. 2008. Combining protein-based IMAC, peptide-based IMAC, and MudPIT for efficient phosphoproteomic analysis. *J. Proteome Res.* 7: 1346-1351.

CHROMOSOMAL LOCATION

Genetic locus: EFR3A (human) mapping to 8q24.22; Efr3a (mouse) mapping to 15 D1.

SOURCE

EFR3A (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of EFR3A of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87786 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EFR3A (E-14) is recommended for detection of EFR3A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with with other KIAA family members.

EFR3A (E-14) is also recommended for detection of EFR3A in additional species, including equine, canine and porcine.

Suitable for use as control antibody for EFR3A siRNA (h): sc-77469, EFR3A siRNA (m): sc-143314, EFR3A shRNA Plasmid (h): sc-77469-SH, EFR3A shRNA Plasmid (m): sc-143314-SH, EFR3A shRNA (h) Lentiviral Particles: sc-77469-V and EFR3A shRNA (m) Lentiviral Particles: sc-143314-V.

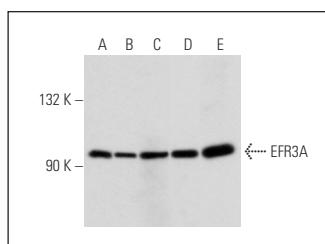
Molecular Weight of EFR3A isoforms: 93/89/88 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, SW480 cell lysate: sc-2219 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



EFR3A (E-14): sc-87786. Western blot analysis of EFR3A expression in HeLa (A), U-251-MG (B), K-562 (C), SW480 (D) and NIH/3T3 (E) whole cell lysates.

RESEARCH USE

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