

# ETAA16 (S-15): sc-138778

## BACKGROUND

ETAA16 (Ewing's tumor-associated antigen 16), also known as ETAA1, is a 926 amino acid cytoplasmic protein that is highly expressed in kidney, brain, liver and Ewing tumor cell lines. ETAA16 undergoes post-translational phosphorylation following DNA damage, most likely by either ATM or ATR, and is suggested to function as a tumour-specific cell surface antigen in Ewing's family of tumour cell lines. The gene encoding ETAA16 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

## REFERENCES

1. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.
2. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.
3. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
4. Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. *Nat. Genet.* 31: 79-83.
5. Kelsell, D.P., et al. 2005. Mutations in ABCA12 underlie the severe congenital skin disease harlequin ichthyosis. *Am. J. Hum. Genet.* 76: 794-803.
6. Borowski, A., et al. 2006. Structure and function of ETAA16: a novel cell surface antigen in Ewing's tumours. *Cancer Immunol. Immunother.* 55: 363-374.

## CHROMOSOMAL LOCATION

Genetic locus: ETAA1 (human) mapping to 2p14; Etaa1 (mouse) mapping to 11 A3.1.

## SOURCE

ETAA16 (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of ETAA16 of human origin.

## 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-138778 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

ETAA16 (S-15) is recommended for detection of ETAA16 of human origin and Etaa1 of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ETAA16 (S-15) is also recommended for detection of ETAA16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ETAA16 siRNA (h): sc-94927, Etaa1 siRNA (m): sc-144952, ETAA16 shRNA Plasmid (h): sc-94927-SH, Etaa1 shRNA Plasmid (m): sc-144952-SH, ETAA16 shRNA (h) Lentiviral Particles: sc-94927-V and Etaa1 shRNA (m) Lentiviral Particles: sc-144952-V.

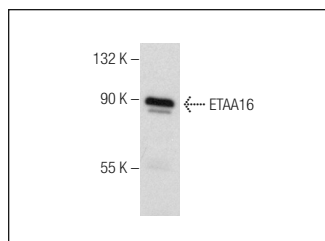
Molecular Weight of ETAA16: 103 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

## 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



ETAA16 (S-15): sc-138778. Western blot analysis of ETAA16 expression in MCF7 whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.