

# KIAA0100 (T-16): sc-164738

## BACKGROUND

KIAA0100, also known as UPF0378 protein KIAA0100, antigen MLAA-22 or BCOX1, is a 2,235 amino acid secreted protein belonging to the UPF0378 family. Localizing to cytoplasm, KIAA0100 is expressed in pancreas and placenta and is up-regulated in breast carcinoma epithelial cells, ductal *in situ* carcinoma, invasive breast carcinoma and metastatic breast carcinoma cells. KIAA0100 exists as four alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 17q11.2. Chromosome 17 makes up over 2.5% of the human genome with approximately 81 million bases encoding over 1,200 genes. Neurofibromatosis, a condition characterized by neural and epidermal lesions, dysregulated Schwann cell growth, Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are associated with chromosome 17.

## REFERENCES

1. Song, J., et al. 2006. Identification of BCOX1, a novel gene overexpressed in breast cancer. *Biochim. Biophys. Acta* 1760: 62-69.
2. Nusbaum, R., et al. 2006. Susceptibility to breast cancer: hereditary syndromes and low penetrance genes. *Breast Dis.* 27: 21-50.
3. Zody, M.C., et al. 2006. DNA sequence of human chromosome 17 and analysis of rearrangement in the human lineage. *Nature* 440: 1045-1049.
4. Suela, J., et al. 2007. Neurofibromatosis 1, and Not TP53, seems to be the main target of chromosome 17 deletions in *de novo* acute myeloid leukemia. *J. Clin. Oncol.* 25: 1151-1152.
5. Farrell, C.J., et al. 2007. Genetic causes of brain tumors: neurofibromatosis, tuberous sclerosis, von Hippel-Lindau, and other syndromes. *Neurol. Clin.* 25: 925-946.
6. Murakami, N., et al. 2008. Novel deletion mutation in GFAP gene in an infantile form of Alexander disease. *Pediatr. Neurol.* 38: 50-52.
7. Zhou, F.L., et al. 2008. Bioinformatic analysis and identification for a novel antigen MLAA-22 in acute monocytic leukemia. *Zhongguo Shi Yan Xue Ye Xue Za Zhi* 16: 466-471.

## CHROMOSOMAL LOCATION

Genetic locus: KIAA0100 (human) mapping to 17q11.2; 2610507B11Rik (mouse) mapping to 11 B5.

## SOURCE

KIAA0100 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KIAA0100 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-164738 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

KIAA0100 (T-16) is recommended for detection of KIAA0100 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other KIAA family members.

KIAA0100 (T-16) is also recommended for detection of KIAA0100 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for KIAA0100 siRNA (h): sc-93983, KIAA0100 siRNA (m): sc-146439, KIAA0100 shRNA Plasmid (h): sc-93983-SH, KIAA0100 shRNA Plasmid (m): sc-146439-SH, KIAA0100 shRNA (h) Lentiviral Particles: sc-93983-V and KIAA0100 shRNA (m) Lentiviral Particles: sc-146439-V.

Molecular Weight of KIAA0100 isoforms 1/2/3: 254/250/45 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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