## BACKGROUND

LOC644511 is a 181 amino acid protein that is encoded by a gene which maps to chromosome 10. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately $4.5 \%$ of the total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria. The LOC644511 gene product has been provisionally designated LOC644511 pending further characterization.

## REFERENCES

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2. Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. Cytogenet. Cell Genet. 90: 1-12.
3. Gilbert, F. 2001. Chromosome 10. Genet. Test. 5: 69-82.
4. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics. 4: 1-15.
5. Nonneman, D., et al. 2004. Comparative mapping of human chromosome 10 to pig chromosomes 10 and 14. Anim. Genet. 35: 338-343.
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7. Chen, L., et al. 2005. Roles of FGF signaling in skeletal development and human genetic diseases. Front. Biosci. 10: 1961-1976.
8. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. Am. J. Surg. Pathol. 32: 1258-1264.

## CHROMOSOMAL LOCATION

Genetic locus: LOC644511 (human) mapping to $10 q 25.2$.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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 or our catalog for detailed protocols and support products.

## SOURCE

LOC644511 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of LOC644511 of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{glgG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-133333 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

LOC644511 (C-13) is recommended for detection of LOC644511 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:1001:1000), immunofluorescence (starting dilution 1:50, dilution range 1:501:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:301:3000).

Suitable for use as control antibody for LOC644511 siRNA (h): sc-90771, LOC644511 shRNA Plasmid (h): sc-90771-SH and LOC644511 shRNA (h) Lentiviral Particles: sc-90771-V.

Molecular Weight of LOC644511: 21 kDa .

## 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 MarkerTM compatible goat antirabbit 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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:1001:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

