

CPXCR1 (H-9): sc-271598

BACKGROUND

CPXCR1 (CPX chromosomal region candidate gene 1 protein) is a 301 amino acid protein encoded by the human gene CPXCR1 located on the X chromosome. The CPXCR1 chromosomal region is known as the X-linked cleft palate and ankyloglossia (CPX) critical region. X-linked cleft palate (CPX), a congenital, semi-dominant disorder that is influenced only by genetic factors, is influenced by mutations within this region. Ankyloglossia (tongue-tie) is also associated with X-linked cleft palate in an Icelandic population. In this population the gene responsible for cleft palate (CPX) was assigned to the Xq21.3-q22 region between DXYS12 and DXS17.

REFERENCES

1. Björnsson, A., et al. 1989. X-linked cleft palate and ankyloglossia in an Icelandic family. *Cleft Palate J.* 26: 3-8.
2. Gorski, S.M., et al. 1992. The gene responsible for X-linked cleft palate (CPX) in a British Columbia native kindred is localized between PGK1 and DXYS1. *Am. J. Hum. Genet.* 50: 1129-1136.
3. Gorski, S.M., et al. 1994. Linkage analysis of X-linked cleft palate and ankyloglossia in Manitoba Mennonite and British Columbia native kindreds. *Hum. Genet.* 94: 141-148.
4. Forbes, S.A., et al. 1996. Refined mapping and YAC contig construction of the X-linked cleft palate and ankyloglossia locus (CPX) including the proximal X-Y homology breakpoint within Xq21.3. *Genomics* 31: 36-43.

CHROMOSOMAL LOCATION

Genetic locus: CPXCR1 (human) mapping to Xq21.31; Cpxcr1 (mouse) mapping to X E1.

SOURCE

CPXCR1 (H-9) is a mouse monoclonal antibody raised against amino acids 1-88 mapping at the N-terminus of CPXCR1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CPXCR1 (H-9) is available conjugated to agarose (sc-271598 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271598 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271598 PE), fluorescein (sc-271598 FITC), Alexa Fluor[®] 488 (sc-271598 AF488), Alexa Fluor[®] 546 (sc-271598 AF546), Alexa Fluor[®] 594 (sc-271598 AF594) or Alexa Fluor[®] 647 (sc-271598 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-271598 AF680) or Alexa Fluor[®] 790 (sc-271598 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

CPXCR1 (H-9) is recommended for detection of CPXCR1 of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (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 CPXCR1 siRNA (h): sc-90983, CPXCR1 siRNA (m): sc-142552, CPXCR1 shRNA Plasmid (h): sc-90983-SH, CPXCR1 shRNA Plasmid (m): sc-142552-SH, CPXCR1 shRNA (h) Lentiviral Particles: sc-90983-V and CPXCR1 shRNA (m) Lentiviral Particles: sc-142552-V.

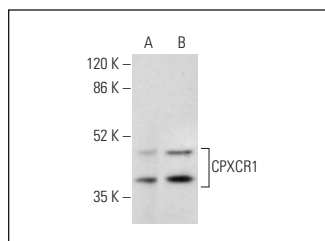
Molecular Weight of CPXCR1: 35 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or SCC-4 whole cell lysate: sc-364363.

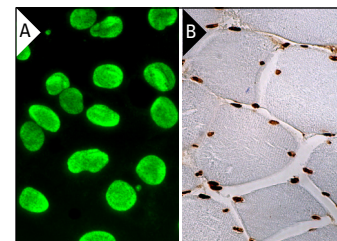
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CPXCR1 (H-9): sc-271598. Western blot analysis of CPXCR1 expression in Jurkat (A) and HeLa (B) whole cell lysates.



CPXCR1 (H-9): sc-271598. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing nuclear staining of myocytes (B).

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.