

# CRX (H-120): sc-30150

## BACKGROUND

The cone-rod homeobox-containing gene (CRX) encodes a transcription factor that coordinates the expression of several photoreceptor genes in the developing retina, including opsin and rhodopsin. Specifically, CRX binds the OTX motif (TAATCC/A) upstream from photoreceptor genes. The CRX gene is also expressed in the pinealocytes of the pineal gland and may regulate pineal circadian activity by controlling the expression of melatonin synthesis genes. Furthermore, CRX<sup>-</sup> mice exhibit disruption of circadian rhythms. The human CRX gene maps to chromosome 19q13.33 within the region of the cone-rod dystrophy-2 locus (CORD2). Mutations in the CRX gene are implicated in the visual pathologies of CORD, Leber congenital amaurosis (LCA) and retinitis pigmentosa (RP). All characterized CRX gene mutations produce disease in heterozygotes although there is no known correlation between the pathologic phenotype and genetic mutation. Missense mutations of the CRX gene affect the homeobox domain, whereas frameshift mutations affect the OTX domain.

## CHROMOSOMAL LOCATION

Genetic locus: CRX (human) mapping to 19q13.33; Crx (mouse) mapping to 7 A2.

## SOURCE

CRX (H-120) is a rabbit polyclonal antibody raised against amino acids 166-285 mapping near the C-terminus of CRX of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-30150 X, 200 µg/0.1 ml.

## APPLICATIONS

CRX (H-120) is recommended for detection of CRX 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).

CRX (H-120) is also recommended for detection of CRX in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for CRX siRNA (h): sc-38649, CRX siRNA (m): sc-38650, CRX shRNA Plasmid (h): sc-38649-SH, CRX shRNA Plasmid (m): sc-38650-SH, CRX shRNA (h) Lentiviral Particles: sc-38649-V and CRX shRNA (m) Lentiviral Particles: sc-38650-V.

CRX (H-120) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

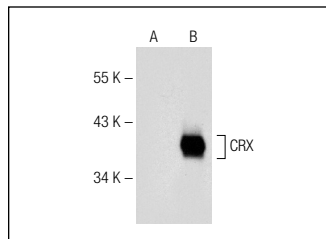
Molecular Weight of CRX: 32 kDa.

Positive Controls: CRX (m): 293T Lysate: sc-126669, Y79 cell lysate: sc-2240 or ARPE-19 whole cell lysate.

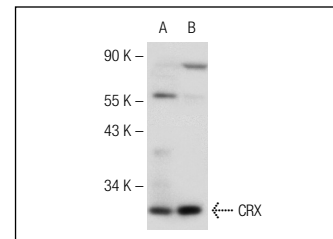
## STORAGE

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

## DATA



CRX (H-120): sc-30150. Western blot analysis of CRX expression in non-transfected: sc-117752 (A) and mouse CRX transfected: sc-126669 (B) 293T whole cell lysates.



CRX (H-120): sc-30150. Western blot analysis of CRX expression in Y79 (A) and ARPE-19 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Glubrecht, D.D., et al. 2009. Differential CRX and OTX2 expression in human retina and retinoblastoma. *J. Neurochem.* 111: 250-263.
2. Dennis, M.Y., et al. 2009. A common variant associated with dyslexia reduces expression of the KIAA0319 gene. *PLoS Genet.* 5: e1000436.
3. Santagata, S., et al. 2009. CRX is a diagnostic marker of retinal and pineal lineage tumors. *PLoS ONE* 4: e7932.
4. Brzezinski, J.A., et al. 2010. Blimp1 controls photoreceptor versus bipolar cell fate choice during retinal development. *Development* 137: 619-629.
5. Cho, Y.J., et al. 2011. Integrative genomic analysis of medulloblastoma identifies a molecular subgroup that drives poor clinical outcome. *J. Clin. Oncol.* 29: 1424-1430.

## 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.

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Try **CRX (A-9): sc-377138** or **CRX (B-11): sc-377207**, our highly recommended monoclonal alternatives to CRX (H-120).