

SMPX (G-25): sc-134015

BACKGROUND

SMPX (small muscle protein, X-linked), also known as SRMX, is an 86 amino acid protein that is preferentially expressed at high levels in heart and skeletal muscle where it is thought to play a role in muscle structure during growth, repair and adaptation. Defects in the gene encoding SMPX, which maps to human chromosome X, may play a role in the development of X-linked cardiac or muscle disorders. Chromosome X, one of the two human sex chromosomes, contains nearly 153 million base pairs and encodes over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination, as an X and a Y chromosome lead to normal male development, while two copies of an X chromosome lead to normal female development. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SMPX (human) mapping to Xp22.12.

SOURCE

SMPX (G-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic SMPX peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

SMPX (G-25) is recommended for detection of SMPX of human and canine 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SMPX siRNA (h): sc-90898, SMPX shRNA Plasmid (h): sc-90898-SH and SMPX shRNA (h) Lentiviral Particles: sc-90898-V.

Molecular Weight (predicted) of SMPX: 10 kDa.

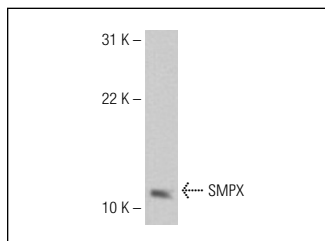
Molecular Weight (observed) of SMPX: 12 kDa.

Positive Controls: Human fetal muscle tissue extract.

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).

DATA



SMPX (G-25): sc-134015. Western blot analysis of SMPX expression in human fetal muscle tissue extract.

STORAGE

Store at 4° 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.