

Vgl-2 (P-23): sc-134148

BACKGROUND

Vgl-2 (transcription cofactor vestigial-like protein 2), also known as VITO-1, is a 317 amino acid protein that contains a domain through which it interacts with TEF-1, a protein that plays a role in controlling the expression of numerous genes. Specific to skeletal muscle, Vgl-2 is expressed highly in adult fast muscle and is expressed at lower levels in adult slow muscle and fetal skeletal muscle. During muscle differentiation, Vgl-2 mRNA levels increase and Vgl-2 translocates from the cytoplasm to the nucleus. Overexpression of Vgl-2 in MyoD-transfected 10T1/2 mouse embryonic fibroblasts increases expression of myosin heavy chain (MHC), which is a marker of terminal muscle differentiation. This evidence suggests that Vgl-2 may be essential for muscle gene expression. There are two isoforms of Vgl-2 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VGLL2 (human) mapping to 6q22.1.

SOURCE

Vgl-2 (P-23) is an affinity purified rabbit polyclonal antibody raised against synthetic Vgl-2 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Vgl-2 (P-23) is recommended for detection of Vgl-2 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 Vgl-2 siRNA (h): sc-95052, Vgl-2 shRNA Plasmid (h): sc-95052-SH and Vgl-2 shRNA (h) Lentiviral Particles: sc-95052-V.

Molecular Weight (predicted) of Vgl-2: 33 kDa.

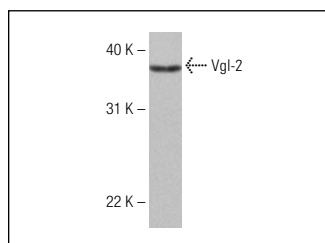
Molecular Weight (observed) of Vgl-2: 36 kDa.

Positive Controls: Human fetal heart 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



Vgl-2 (P-23): sc-134148. Western blot analysis of Vgl-2 expression in human fetal heart 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.