# Paraxis (H-55): sc-98796



The Power to Question

# **BACKGROUND**

The novel basic helix-loop-helix (bHLH) transcription factor, twist, is a putative regulator of mesodermal differentiation and myogenesis. Twist is expressed throughout the epithelial somite but not in the myotome. Twist requires dimerization with E proteins, such as Paraxis, and inhibits myogenic regulatory factors. As an early transcriptional regulator, Paraxis determines the mesoderm pattern and governs the type of mesoderm-derived cells. Paraxis is also involved in the regulaton of morphogenetic activites during somitogenesis. Paraxis, a nuclear protein containing one bHLH domain, requires dimerization with another protein in order to bind DNA efficiently.

# **REFERENCES**

- Carpio, R., et al. 2004. Xenopus Paraxis homolog shows novel domains of expression. Dev. Dyn. 231: 609-613.
- Wilson-Rawls, J., et al. 2004. Paraxis is a basic helix-loop-helix protein that positively regulates transcription through binding to specific E-box elements. J. Biol. Chem. 279: 37685-37692.

# CHROMOSOMAL LOCATION

Genetic locus: TCF15 (human) mapping to 20p13; Tcf15 (mouse) mapping to 2 G3.

# **SOURCE**

Paraxis (H-55) is a rabbit polyclonal antibody raised against amino acids 4-42 mapping at the N-terminus of Paraxis of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98796 X, 200  $\mu g$ /0.1 ml.

#### **APPLICATIONS**

Paraxis (H-55) is recommended for detection of Paraxis of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Paraxis (H-55) is also recommended for detection of Paraxis in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Paraxis siRNA (h): sc-45841, Paraxis siRNA (m): sc-45842, Paraxis shRNA Plasmid (h): sc-45841-SH, Paraxis shRNA Plasmid (m): sc-45842-SH, Paraxis shRNA (h) Lentiviral Particles: sc-45841-V and Paraxis shRNA (m) Lentiviral Particles: sc-45842-V.

Paraxis (H-55) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

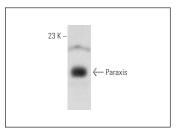
Molecular Weight of Paraxis: 21 kDa.

Positive Controls: human umbilical cord extract: sc-363783.

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

# **DATA**



Paraxis (H-55): sc-98796. Western blot analysis of Paraxis expression in human umbilical cord 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.



Try **Paraxis (B-6): sc-514687**, our highly recommended monoclonal alternative to Paraxis (H-55).

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