

TCF15 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP18248c

Specification

TCF15 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>012870</u>

TCF15 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 6939

Other Names

Transcription factor 15, TCF-15, Class A basic helix-loop-helix protein 40, bHLHa40, Paraxis, Protein bHLH-EC2, TCF15, BHLHA40, BHLHEC2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TCF15 Antibody (Center) Blocking Peptide - Protein Information

Name TCF15 (HGNC:11627)

Function

Early transcription factor that plays a key role in somitogenesis, paraxial mesoderm development and regulation of stem cell pluripotency. Essential for the mesenchymal to epithelial transition associated with somite formation. Required for somite morphogenesis, thereby regulating patterning of the axial skeleton and skeletal muscles. Required for proper localization of somite epithelium markers during the mesenchymal to epithelial transition. Also plays a key role in regulation of stem cell pluripotency. Promotes pluripotency exit of embryonic stem cells (ESCs) by priming ESCs for differentiation. Acts as a key regulator of self-renewal of hematopoietic stem cells (HSCs) by mediating HSCs quiescence and long- term self-renewal. Together with MEOX2, regulates transcription in heart endothelial cells to regulate fatty acid transport across heart endothelial cells. Acts by forming a heterodimer with another helix- loop-helix (bHLH) protein, such as TCF3/E12, that binds DNA on E-box motifs (5'-CANNTG-3') and activates transcription of target genes.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q60756, ECO:0000255|PROSITE-ProRule:PRU00981}



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TCF15 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

TCF15 Antibody (Center) Blocking Peptide - Images

TCF15 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene is found in the nucleusand may be involved in the early transcriptional regulation ofpatterning of the mesoderm. The encoded basic helix-loop-helixprotein requires dimerization with another basic helix-loop-helixprotein for efficient DNA binding.

TCF15 Antibody (Center) Blocking Peptide - References

Guo, P., et al. J. Biol. Chem. 284(27):18184-18193(2009)Deloukas, P., et al. Nature 414(6866):865-871(2001)Hidai, H., et al. Genomics 30(3):598-601(1995)Quertermous, E.E., et al. Proc. Natl. Acad. Sci. U.S.A. 91(15):7066-7070(1994)