

## WBP5 siRNA (m): sc-155244

### BACKGROUND

WW domain-binding protein 5 (WBP5), also known as TCEAL9, is a 104 amino acid protein and is a member of the TFS-II family and the TFA subfamily. The WW domain is composed of 38 to 40 semi-conserved amino acids and is shared by various groups of proteins, including structural, regulatory and signaling proteins. The domain mediates protein-protein interactions through the binding of polyproline ligands. The gene encoding WBP5 is located on human chromosome X, which comprises of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

### REFERENCES

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6. Hayashi, T., Kubo, A., Takeuchi, T., Gekka, T., Goto-Omoto, S. and Kitahara, K. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. *Vis. Neurosci.* 23: 411-417.
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### CHROMOSOMAL LOCATION

Genetic locus: Wbp5 (mouse) mapping to X F1.

### PRODUCT

WBP5 siRNA (m) is a pool of 2 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see WBP5 shRNA Plasmid (m): sc-155244-SH and WBP5 shRNA (m) Lentiviral Particles: sc-155244-V as alternate gene silencing products.

For independent verification of WBP5 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-155244A and sc-155244B.

### STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNases and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

### APPLICATIONS

WBP5 siRNA (m) is recommended for the inhibition of WBP5 expression in mouse cells.

### SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10  $\mu$ M in 66  $\mu$ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

### RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor WBP5 gene expression knockdown using RT-PCR Primer: WBP5 (m)-PR: sc-155244-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

### 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) for detailed protocols and support products.