

## Product datasheet for **SR416345**

### **P4hb Mouse siRNA Oligo Duplex (Locus ID 18453)**

#### **Product data:**

<b>Product Type:</b>	siRNA Oligo Duplexes
<b>Purity:</b>	HPLC purified
<b>Quality Control:</b>	Tested by ESI-MS
<b>Sequences:</b>	Available with shipment
<b>Stability:</b>	One year from date of shipment when stored at -20°C.
<b># of transfections:</b>	Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).
<b>Note:</b>	Single siRNA duplex (10nmol) can be ordered.
<b>RefSeq:</b>	<a href="#">NM_011032</a>
<b>UniProt ID:</b>	<a href="#">P09103</a>
<b>Synonyms:</b>	ERp59; PDI; Pdia1; Thbp
<b>Components:</b>	P4hb (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 18453) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml
<b>Summary:</b>	This multifunctional protein catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. May therefore cause structural modifications of exofacial proteins. Inside the cell, seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, facilitates aggregation (anti-chaperone activity). May be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. Also acts a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP (By similarity). Receptor for LGALS9; the interaction retains P4HB at the cell surface of Th2 T helper cells, increasing disulfide reductase activity at the plasma membrane, altering the plasma membrane redox state and enhancing cell migration (PubMed:21670307).[UniProtKB/Swiss-Prot Function]



[View online »](#)

**Performance  
Guaranteed:**

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).