

## Product datasheet for **SR305951**

### **BRSK2 Human siRNA Oligo Duplex (Locus ID 9024)**

#### **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_001256627</a> , <a href="#">NM_001256629</a> , <a href="#">NM_001256630</a> , <a href="#">NM_001282218</a> , <a href="#">NM_003957</a> , <a href="#">NR_046331</a> , <a href="#">NR_046332</a>
<b>UniProt ID:</b>	<a href="#">Q8IWO3</a>
<b>Synonyms:</b>	C11orf7; PEN11B; SAD1; SADA; STK29
<b>Components:</b>	BRSK2 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 9024) 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>	Serine/threonine-protein kinase that plays a key role in polarization of neurons and axonogenesis, cell cycle progress and insulin secretion. Phosphorylates CDK16, CDC25C, MAPT/TAU, PAK1 and WEE1. Following phosphorylation and activation by STK11/LKB1, acts as a key regulator of polarization of cortical neurons, probably by mediating phosphorylation of microtubule-associated proteins such as MAPT/TAU at 'Thr-529' and 'Ser-579'. Also regulates neuron polarization by mediating phosphorylation of WEE1 at 'Ser-642' in postmitotic neurons, leading to down-regulate WEE1 activity in polarized neurons. Plays a role in the regulation of the mitotic cell cycle progress and the onset of mitosis. Plays a role in the regulation of insulin secretion in response to elevated glucose levels, probably via phosphorylation of CDK16 and PAK1. While BRSK2 phosphorylated at Thr-174 can inhibit insulin secretion (PubMed:22798068), BRSK2 phosphorylated at Thr-260 can promote insulin secretion (PubMed:22669945). Regulates reorganization of the actin cytoskeleton. May play a role in the apoptotic response triggered by endoplasmic reticulum (ER) stress. [UniProtKB/Swiss-Prot Function]



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**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).