

Product datasheet for **SR423705**

Mycbp2 Mouse siRNA Oligo Duplex (Locus ID 105689)

Product data:

Product Type:	siRNA Oligo Duplexes
Purity:	HPLC purified
Quality Control:	Tested by ESI-MS
Sequences:	Available with shipment
Stability:	One year from date of shipment when stored at -20°C.
# of transfections:	Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).
Note:	Single siRNA duplex (10nmol) can be ordered.
RefSeq:	NM_207215
Synonyms:	AU023734; AW107953; AW546647; C130061D10Rik; Pam; Phr1; R75243
Components:	Mycbp2 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 105689) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



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Summary:

Atypical E3 ubiquitin-protein ligase which specifically mediates ubiquitination of threonine and serine residues on target proteins, instead of ubiquitinating lysine residues (By similarity). Shows esterification activity towards both threonine and serine, with a preference for threonine, and acts via two essential catalytic cysteine residues that relay ubiquitin to its substrate via thioester intermediates (By similarity). Interacts with the E2 enzymes UBE2D1, UBE2D3, UBE2E1 and UBE2L3 (By similarity). Plays a key role in neural development, probably by mediating ubiquitination of threonine residues on target proteins (By similarity). Involved in different processes such as regulation of neurite outgrowth, synaptic growth, synaptogenesis and axon degeneration (PubMed:14729956, PubMed:17901218, PubMed:18031680). Required for the formation of major central nervous system axon tracts (PubMed:17901218, PubMed:18031680). Required for proper axon growth by regulating axon navigation and axon branching: acts by regulating the subcellular location and stability of MAP3K12/DLK (PubMed:18031680). Required for proper localization of retinogeniculate projections but not for eye-specific segregation (PubMed:19371781, PubMed:21324225). Regulates axon guidance in the olfactory system (PubMed:23525682). Involved in Wallerian axon degeneration, an evolutionarily conserved process that drives the loss of damaged axons: acts by promoting destabilization of NMNAT2, probably via ubiquitination of NMNAT2 (PubMed:23665224). Catalyzes ubiquitination of threonine and/or serine residues on NMNAT2, consequences of threonine and/or serine ubiquitination are however unknown (By similarity). Regulates the internalization of TRPV1 in peripheral sensory neurons (PubMed:21098484). May mediate ubiquitination and subsequent proteasomal degradation of TSC2/tuberin (By similarity). Independently of the E3 ubiquitin-protein ligase activity, also acts as a guanosine exchange factor (GEF) for RAN in neurons of dorsal root ganglia (PubMed:26304119). May function as a facilitator or regulator of transcriptional activation by MYC (By similarity). Acts in concert with HUWE1 to regulate the circadian clock gene expression by promoting the lithium-induced ubiquitination and degradation of NR1D1 (PubMed:20534529).[UniProtKB/Swiss-Prot Function]

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. 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).