

## Product datasheet for **SR401585**

### Tyrobp Mouse siRNA Oligo Duplex (Locus ID 22177)

#### 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:	<a href="#">NM_011662</a>
UniProt ID:	<a href="#">O54885</a>
Synonyms:	DAP12; KARAP; Ly83
Components:	Tyrobp (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 22177) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



[View online »](#)

**Summary:**

Adapter protein which non-covalently associates with activating receptors found on the surface of a variety of immune cells to mediate signaling and cell activation following ligand binding by the receptors (PubMed:15471863, PubMed:9647200). TYROBP is tyrosine-phosphorylated in the ITAM domain following ligand binding by the associated receptors which leads to activation of additional tyrosine kinases and subsequent cell activation (PubMed:15728241). Also has an inhibitory role in some cells (PubMed:21727189). Non-covalently associates with activating receptors of the CD300 family to mediate cell activation (By similarity). Also mediates cell activation through association with activating receptors of the CD200R family (PubMed:15471863). Required for neutrophil activation mediated by integrin (PubMed:17086186). Required for the activation of myeloid cells mediated by the CLEC5A/MDL1 receptor (By similarity). Associates with natural killer (NK) cell receptors such as the KLRD1/KLRC2 heterodimer to mediate NK cell activation (By similarity). Also associates non-covalently with the NK cell receptors KLRA4/LY49D and KLRA8/LY49H which leads to NK cell activation (PubMed:9647200). Associates with TREM1 to mediate activation of neutrophils and monocytes (By similarity). Associates with TREM2 on monocyte-derived dendritic cells to mediate up-regulation of chemokine receptor CCR7 and dendritic cell maturation and survival (By similarity). Association with TREM2 mediates cytokine-induced formation of multinucleated giant cells which are formed by the fusion of macrophages (PubMed:18957693). Stabilizes the TREM2 C-terminal fragment (TREM2-CTF) which is produced by TREM2 ectodomain shedding (By similarity). In microglia, required with TREM2 for phagocytosis of apoptotic neurons (PubMed:15728241). Required with ITGAM/CD11B in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development (PubMed:18685038). Promotes proinflammatory responses in microglia following nerve injury which accelerates degeneration of injured neurons (PubMed:25690660). Positively regulates the expression of the IRAK3/IRAK-M kinase and IL10 production by liver dendritic cells and inhibits their T cell allostimulatory ability (PubMed:21257958). Negatively regulates B cell proliferation (PubMed:21727189). Required for CSF1-mediated osteoclast cytoskeletal organization (PubMed:18691974). Positively regulates multinucleation during osteoclast development (PubMed:12569157, PubMed:14969392).[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](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).