

## Product datasheet for **TL302198**

### CD45 (PTPRC) Human shRNA Plasmid Kit (Locus ID 5788)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	CD45 (PTPRC) Human shRNA Plasmid Kit (Locus ID 5788)
Locus ID:	5788
Synonyms:	B220; CD45; CD45R; GP180; L-CA; LCA; LY5; T200
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	PTPRC - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5788). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001267798</a> , <a href="#">NM_002838</a> , <a href="#">NM_080921</a> , <a href="#">NM_080922</a> , <a href="#">NM_080923</a> , <a href="#">NR_052021</a> , <a href="#">NM_002838.1</a> , <a href="#">NM_002838.2</a> , <a href="#">NM_002838.3</a> , <a href="#">NM_002838.4</a> , <a href="#">NM_080921.1</a> , <a href="#">NM_080921.2</a> , <a href="#">NM_080921.3</a> , <a href="#">NM_001267798.1</a> , <a href="#">NM_080923.1</a> , <a href="#">NM_080922.1</a> , <a href="#">NM_080922.2</a> , <a href="#">NM_080923.2</a> , <a href="#">BC014239</a> , <a href="#">BC017863</a> , <a href="#">BC031525</a> , <a href="#">BC121086</a> , <a href="#">BC121087</a> , <a href="#">BC127656</a> , <a href="#">BC127657</a> , <a href="#">BC148257</a> , <a href="#">BC169206</a> , <a href="#">BC169207</a> , <a href="#">BM791051</a> , <a href="#">NM_001267798.2</a> , <a href="#">NM_002838.5</a>
UniProt ID:	<a href="#">P08575</a>
Summary:	The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]



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**shRNA Design:**

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**Performance Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).