

Product datasheet for **MR208004L3V**

Blk (NM_007549) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Blk (NM_007549) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Blk
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_007549
ORF Size:	1500 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR208004).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_007549.2 , NP_031575.2
RefSeq Size:	2475 bp
RefSeq ORF:	1500 bp
Locus ID:	12143
UniProt ID:	P16277
Cytogenetics:	14 33.25 cM



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Gene Summary:

Non-receptor tyrosine kinase involved in B-lymphocyte development, differentiation and signaling. B-cell receptor (BCR) signaling requires a tight regulation of several protein tyrosine kinases and phosphatases, and associated coreceptors (PubMed:2404338, PubMed:7690139, PubMed:7608542, PubMed:9636152, PubMed:14662906, PubMed:12563261). Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation (PubMed:2404338, PubMed:7690139, PubMed:7608542, PubMed:14662906, PubMed:12563261). Signaling through BLK plays an important role in transmitting signals through surface immunoglobulins and supports the pro-B to pre-B transition, as well as the signaling for growth arrest and apoptosis downstream of B-cell receptor (PubMed:2404338, PubMed:7690139, PubMed:7608542, PubMed:14662906, PubMed:12563261). Specifically binds and phosphorylates CD79A at 'Tyr-188' and 'Tyr-199', as well as CD79B at 'Tyr-196' and 'Tyr-207' (PubMed:7592958, PubMed:9177269). Phosphorylates also the immunoglobulin G receptor FCGR2 (By similarity). With FYN and LYN, plays an essential role in pre-B-cell receptor (pre-BCR)-mediated NF-kappa-B activation (PubMed:14662906, PubMed:12563261). Contributes also to BTK activation by indirectly stimulating BTK intramolecular autophosphorylation (PubMed:7565679). In pancreatic islets, acts as a modulator of beta-cells function through the up-regulation of PDX1 and NKX6-1 and consequent stimulation of insulin secretion in response to glucose (By similarity). Phosphorylates CGAS, promoting retention of CGAS in the cytosol (By similarity).[UniProtKB/Swiss-Prot Function]