

## **Product datasheet for SC318766**

## OriGene Technologies, Inc.

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## SH2D1A (NM\_001114937) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** SH2D1A (NM\_001114937) Human Untagged Clone

Tag: Tag Free Symbol: SH2D1A

Synonyms: DSHP; EBVS; IMD5; LYP; MTCP1; SAP; SAP/SH2D1A; XLP; XLPD; XLPD1

**Vector:** pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001114937, the custom clone sequence may differ by one or

more nucleotides

TGCCTGAAAGCCCCA

**Restriction Sites:** Please inquire ACCN: NM\_001114937

**Insert Size:** 2514 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).







**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM 001114937.1, NP 001108409.1

RefSeq Size: 2514 bp
RefSeq ORF: 2514 bp
Locus ID: 4068
UniProt ID: 060880
Cytogenetics: Xq25

**Protein Families:** Druggable Genome

**Protein Pathways:** Natural killer cell mediated cytotoxicity

**Gene Summary:** This gene encodes a protein that plays a major role in the bidirectional stimulation of T and B

cells. This protein contains an SH2 domain and a short tail. It associates with the signaling lymphocyte-activation molecule, thereby acting as an inhibitor of this transmembrane protein by blocking the recruitment of the SH2-domain-containing signal-transduction molecule SHP-2 to its docking site. This protein can also bind to other related surface molecules that are expressed on activated T, B and NK cells, thereby modifying signal transduction pathways in these cells. Mutations in this gene cause lymphoproliferative syndrome X-linked type 1 or Duncan disease, a rare immunodeficiency characterized by extreme susceptibility to infection with Epstein-Barr virus, with symptoms including severe mononucleosis and malignant lymphoma. Multiple transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1, resulting in a shorter protein (isoform 2), compared to isoform 1.