

## SUPPLEMENTARY INFORMATION

**Supplementary FIGURE 1.** Nucleotide sequence and deduced amino acid sequence of mouse *s5d-srcrb*. The putative signal peptide is *double underlined*. SRCR domains are *single underlined* and the sequence with homology to syndecan domain is *dash underlined*. Nucleotides at the exon-intron boundaries are highlighted in *bold italics*. The putative N-glycosylation sites and the stop codon are marked with a circle and an asterisk, respectively.

**Supplementary FIGURE 2.** RT-qPCR analysis of *s5d-srcrb* expression in normal and leukemic cells. TRIzol total RNA preparations from the indicated mouse cells and tissues were retrotranscribed into cDNA using the SuperScript<sup>TM</sup> III First-Strand Synthesis System (Invitrogen). The primers and cycling conditions used for amplification of *18S* and *s5d-srcrb* genes were the same as those used in **Fig. 3** and reported in the Materials and Methods section. Gene expression was normalized to housekeeping gene *18S* and expressed in arbitrary units. BMDMo resting, unstimulated bone marrow-derived monocytes (>95% CD11+); BMDMo LPS(+), BMDMo activated for 6 hs with 1ng/ml LPS. HEK 293 transfectants, HEK 293-EBNA cells stably expressing rmS5D-SRCRB-HA.

**Supplementary FIGURE 3.** Developmental expression of the *s5d-srcrb* transcript. Mouse embryos were obtained from CD1 mice matings and collected at 9.5 dpc. Whole-mount in situ hybridization was performed essentially as described\*, using digoxigenin-labelled riboprobes. Digoxigenin was detected with NBT/BCIP (Roche) which gives a purple staining. After staining, embryos were fixed in 4% PFA,

cryoprotected in 15% sucrose and embedded in 7.5% gelatine/15% sucrose. Blocks were frozen in 2-Methylbutane (Sigma) to improve tissue preservation, then sectioned at 20 µm thickness on a *Leica* CM 1510-1 cryostat. Whole mount embryos and sections were imaged under a fluorescence microscope *Leica* DM6000B. Whole-mount *in situ* hybridization of 9.5 dpc embryos with *s5d-srcrb* antisense (a-d) and sense (e-h) probe. To generate both probes, cDNA was synthesized from total RNA amplified using primers msd1.FW and msd2.Rv cDNA was then cloned in a pFLCI vector (Qiagen). To obtain the antisense probe, the plasmid was linearized with *SalI* (Roche) and transcribed with T3-RNAPolimerase (Roche). Similarly, for the sense probe linearization was carried out with *SstI* (Roche) and transcription was performed with T7-RNAPolimerase. Note that specific RNA staining with antisense probe revealed *s5d-srcrb* expression in the anterior and lateral aspects of the otic vesicle and in the olfactory placode. nt, neural tube; ov, otic vesicle; olp, olfactory placode.

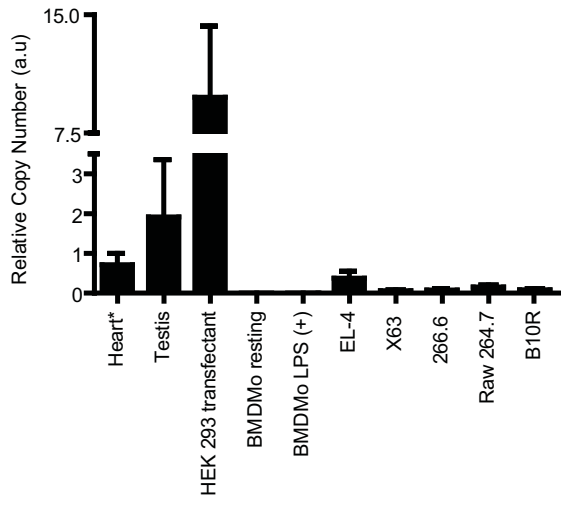
\* Wilkinson, D.G., Nieto, M.A., 1993. Detection of Messenger-Rna by in-Situ Hybridization to Tissue-Sections and Whole Mounts. In *Guide to Techniques in Mouse Development*. **225**. p. 361-373.

**Supplementary FIGURE 4.** RT-qPCR analysis of *s5d-srcrb* expression at embryo developmental stages. RNA preparations were obtained from eight different embryos of C57BL/6J mouse at 9 dpc (a, b, c and d) and 14 dpc (A, B, C and D) using TRIzol (Invitrogen). cDNA synthesis was carried out using the GeneAmp PCR kit (Roche). The primers and cycling conditions used for amplification of *18S* and *s5d-srcrb* genes were the same as those used in **Fig. 3** and reported in the Material and Methods section. Gene expression was normalized to housekeeping gene *18S* and expressed in arbitrary units.

**Supplementary FIGURE 5.** Bactericidal activity was determined by a modification of the turbidimetric growth assay described by Muschel and Treffers (38). *S. aureus* at  $5 \times 10^6$  CFU/ml in TBS plus 5 mM  $\text{CaCl}_2$  were grown alone or exposed to purified rmS5D-SRCRB-HA or BSA for 45 min in a shaker at 37°C and 280 rpm. After this time, the culture was inoculated into 5 ml LB and further incubated at 37°C and 280 rpm until turbidity measured at 600 nm in control tubes reached a DO of between 0.5 and 0.6. Serial dilutions of the cultures were then performed and plated in LB agar and the number of colonies counted in duplicate after overnight incubation at 37°C. Two independent experiments were performed, with similar results; a representative out of the two is shown here.

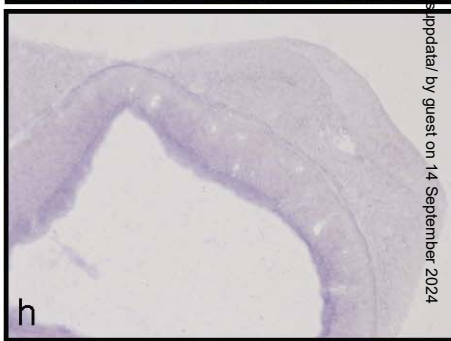
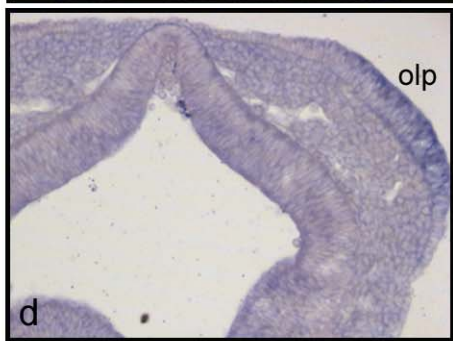
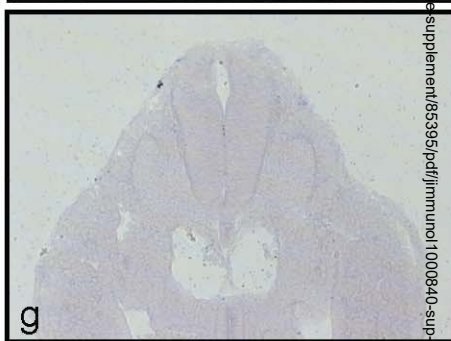
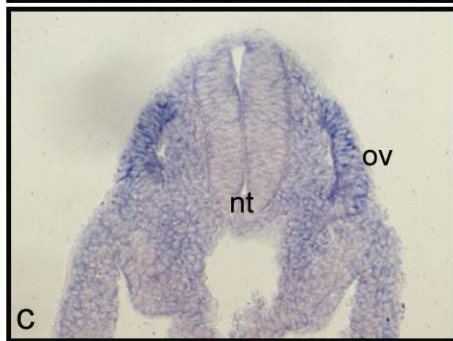
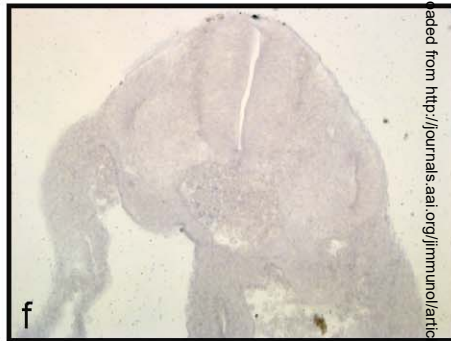
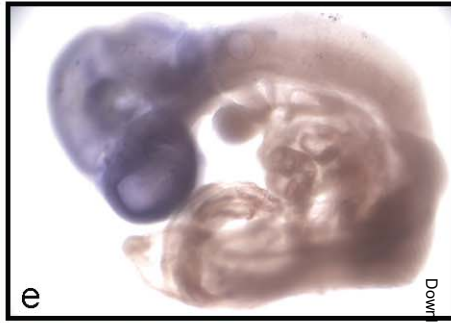


Supplementary Figure 2



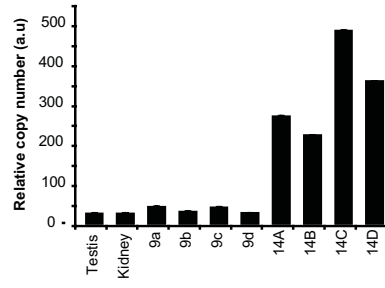
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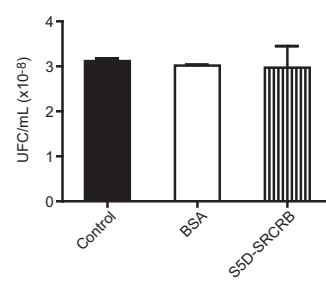


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### Supplementary Figure 4



Supplementary Figure 5





**Supplementary Table I.** *Source of EST clones with the highest E-value for s5d-srcrb.*

EST	Tissue source	Size (nt)	E value
gb BU704083.1	Whole brain: 12.5dpc	1355	0.0
gb BU522633.1	Colon	1220	0.0
gb AI430129.1	E13.5-14.5dpc total fetus	1142	0.0
gb BU756713.1	Trophoblast	1040	0.0
emb CR756934.1	muscle	1031	0.0
gb BQ832084.1	Fetal liver	1027	0.0
emb CR757678.1	Muscle	1023	0.0
gb BQ287699.1	E10.5, E12.5, E16.5, newborn, adult, mixed	1014	0.0
emb CR756931.1	Muscle	942	0.0
gb BU056602.1	Whole brain of E12.5dpc	922	0.0
gb W67038.1	E13.5-14.5dpc total fetus	865	0.0
gb CX208189.1	Lateral wall of lateral ventricle	787	0.0
gb AI845825.1	Pineal gland	751	0.0
gb AI604846.1	E13.5-14.5 dpc total fetus	738	0.0
gb BE652808.1	Pineal gland	722	0.0
gb W42249.1	E19.5 dpc total fetus	679	0.0
emb CR757674.1	Muscle	666	0.0

dpc, days post-conception; E, embryo; EST, expressed-sequence tag;

**Supplementary Table II:** *Reactivity of rat mAbs against recombinant and endogenous mouse S5D-SRCRB protein.*

Hybridoma	Recombinant			Tissue-expressed		
	IP	ELISA	WB	IP	WB	IHC
1H11.A8.G2	+	+	+	-	+	+
5E12.G3.B1	+	+	+	-	+	-
7G4.E1.H7	+	+	+	-	+	-
8F4.F3.F9	+	+	+	-	+	-
4D11.A2.H4	+	+	+	-	+	+
5B7.B8.A1	+	+	+	-	+	-
8C4.D6.C9	+	+	+	-	+	-

The recombinant protein comes from serum-free supernatants of HEK293-EBNA transfectants expressing a C-terminal HA-tagged mouse S5D-SRCRB protein. The tissue expressed protein comes from RIPA buffer solubilizates of mouse testis. IP, Immunoprecipitation. WB, Western blot. IHC, Immunohistochemistry.