



Rabbit Anti-VAX1 antibody

SL11496R

Product Name:	VAX1
Chinese Name:	视神经视网膜相关蛋白VAX1抗体
Alias:	VAX1; VAX1_HUMAN; ventral anterior homeobox 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=0.2µg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	35kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human VAX1:133-200/334
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. VAX1 (ventral anterior homeobox 1) is a 334 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. Expressed as multiple alternatively spliced isoforms, VAX1 is required for major tract formation and axon guidance in the developing brain and may play a role in the differentiation of various structures, including the optic stalk, the neuroretina and the pigmented epithelium. The gene

encoding VAX1 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

Function:

Required for axon guidance and major tract formation in the developing forebrain. May contribute to the differentiation of the neuroretina, pigmented epithelium and optic stalk.

Subcellular Location:

Nucleus.

DISEASE:

Defects in VAX1 are the cause of microphthalmia, syndromic, type 11 (MCOPS11) [MIM:614402]. A rare clinical entity including as main characteristics microphthalmia and small optic nerves, cleft lip and palate, absence of corpus callosum, hippocampal malformations, and absence of the pineal gland. Microphthalmia is a disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities.

Similarity:

Belongs to the EMX homeobox family.
Contains 1 homeobox DNA-binding domain.

SWISS:

Q5SQQ9

Gene ID:

11023

Database links:

[Entrez Gene: 11023](#)Human

[Entrez Gene: 22326](#)Mouse

[Entrez Gene: 64571](#)Rat

[Omim: 604294](#)Human

[SwissProt: Q5SQQ9](#)Human

[SwissProt: Q2NKI2](#)Mouse

[SwissProt: Q9JM00](#)Rat

[Unigene: 441536](#)Human

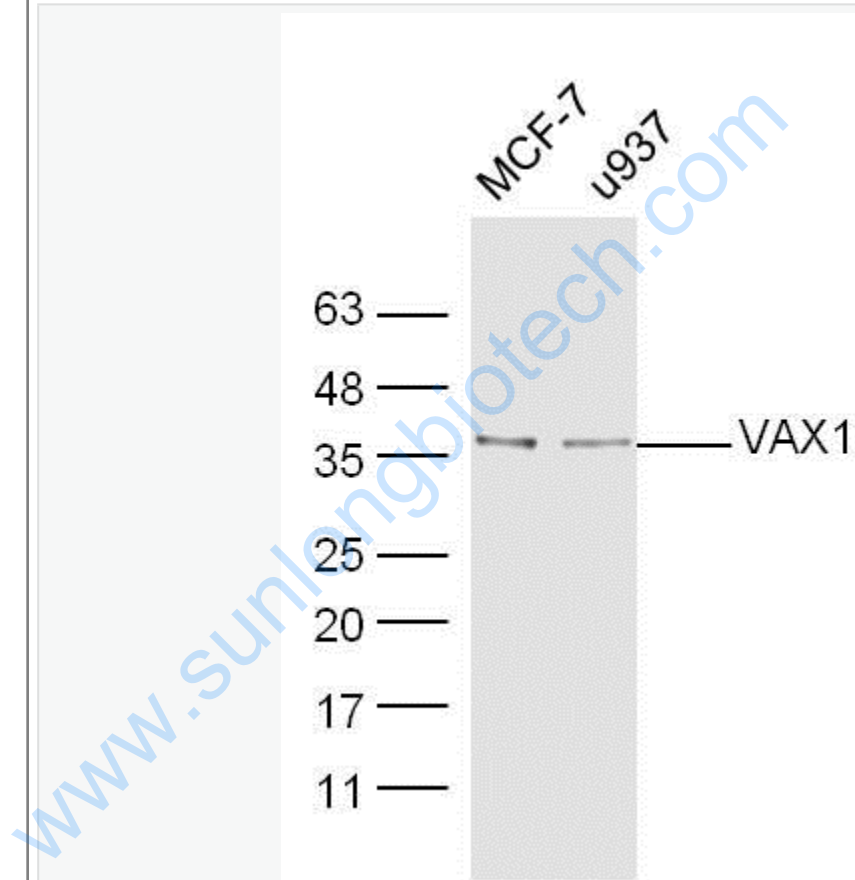
[Unigene: 23801](#)Mouse

[Unigene: 48764](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

MCF-7 Cell (Human) Lysate at 40 ug

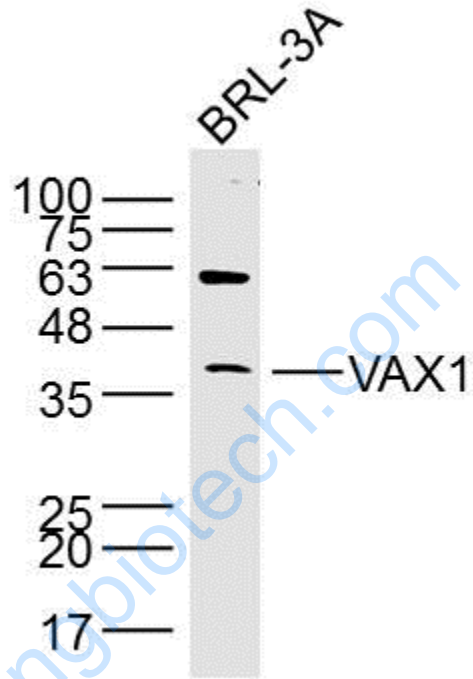
U937 Cell (Human) Lysate at 40 ug

Primary: Anti-VAX1 (SL11496R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 35 kD

Observed band size: 36 kD



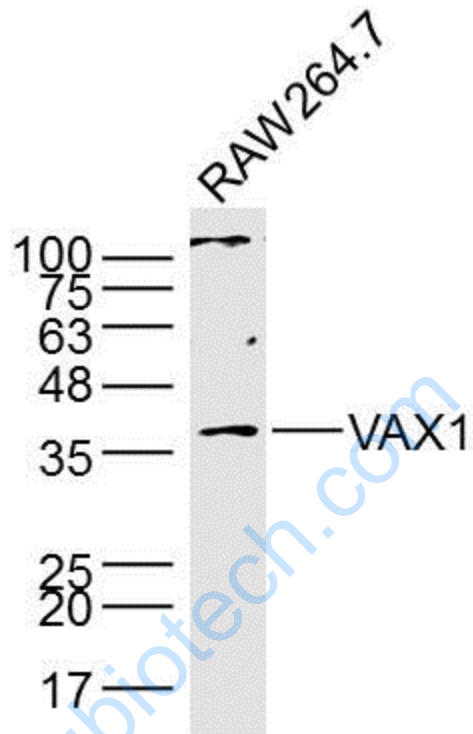
Sample: BRL-3A Cell (Rat) Lysate at 40 ug

Primary: Anti- VAX1 (SL11496R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 35 kD

Observed band size: 37 kD



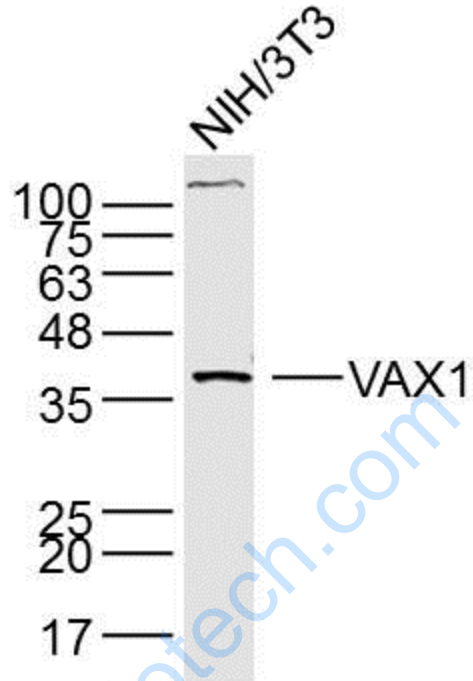
Sample: RAW264.7 Cell (Mouse) Lysate at 40 ug

Primary: Anti- VAX1 (SL11496R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 35 kD

Observed band size: 37 kD



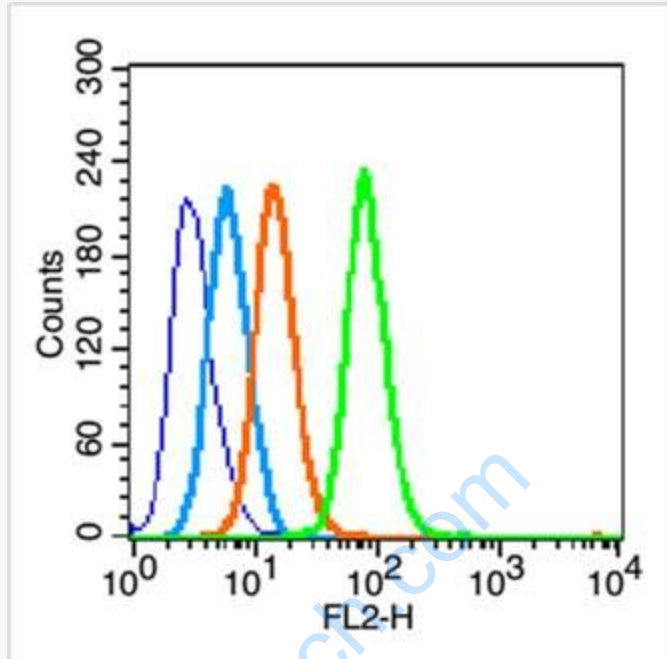
Sample: NIH/3T3 Cell (Mouse) Lysate at 40 ug

Primary: Anti- VAX1 (SL11496R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 35 kD

Observed band size: 37 kD



Blank control (blue line): Hep G2 (fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% methanol for 20 min at -20°C).

Primary Antibody (green line): Rabbit Anti-VAX1 antibody (SL11496R), Dilution: 0.2µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.