Datasheet for ABIN5692972

anti-SPR antibody (AA 36-261)

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	100 µg
Target:	SPR
Binding Specificity:	AA 36-261
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SPR antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human SPR recombinant protein (Position: V36-K261).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for SPR detection. Tested with WB, Direct ELISA in Human,Mouse.

Target Details

Target:	SPR
Alternative Name:	SPR (SPR Products)
Background:	Synonyms: Sepiapterin reductase, SPR, SPR

Target Details

	Background: Sepiapterin reductase is an enzyme that in humans is encoded by the SPR gene. This gene encodes an aldo-keto reductase that catalyzes the NADPH-dependent reduction of pteridine derivatives and is important in the biosynthesis of tetrahydrobiopterin (BH4). Mutations in this gene result in DOPA-responsive dystonia due to sepiaterin reductase deficiency. A pseudogene has been identified on chromosome 1.
UniProt:	P35270
Pathways:	Regulation of Systemic Arterial Blood Pressure by Hormones, Feeding Behaviour, Smooth Muscle Cell Migration

Application Details

Application Notes:	Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot. Application Details: Western blot,0.1-0.5 µg/mL Direct ELISA,0.1-0.5 µg/mL
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na_2HPO_4, 0.05 mg NaN_3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Publications

Product cited in:	Jeng, Jeng, Jeng, Sheen, Li, Lu, Chang: "Tropism of liver epithelial cells toward hepatocellular carcinoma in vitro and in vivo with altering gene expression of cancer stem cells." in: **American**

Publications

journal of surgery, Vol. 215, Issue 4, pp. 735-743, (2017) (PubMed).

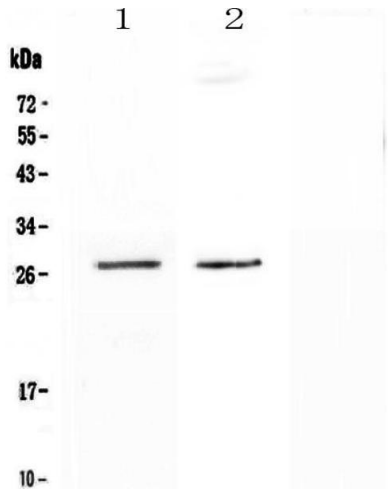
Winkler, Hempel, Brückner, Mallek, Weise, Liehr, Tautenhahn, Bartels, Christ: "Mouse white adipose tissue-derived mesenchymal stem cells gain pericentral and periportal hepatocyte features after differentiation in vitro, which are preserved in vivo after hepatic transplantation." in: **Acta physiologica (Oxford, England)**, Vol. 215, Issue 2, pp. 89-104, (2016) (PubMed).

Yan, Zhu, Sun, Zhang, Li, Sun, Li, Qian, Zhu, Xu: "Extracellular regulated protein kinases 1/2 phosphorylation is required for hepatic differentiation of human umbilical cord-derived mesenchymal stem cells." in: **Experimental biology and medicine (Maywood, N.J.)**, Vol. 240, Issue 4, pp. 534-45, (2015) (PubMed).

Shan, Wu, Li, Shen, Wang, Liu, Shen, Lei: "Continuous passages accelerate the reprogramming of mouse induced pluripotent stem cells." in: **Cellular reprogramming**, Vol. 16, Issue 1, pp. 77-83, (2014) (PubMed).

Wang, Xu, Zhou, Zhong, Wen, Yu, Chen, Shen, Chen, She, Jiang, Miao, Wei: "The viral oncoprotein HBx of Hepatitis B virus promotes the growth of hepatocellular carcinoma through cooperating with the cellular oncoprotein RMP." in: **International journal of biological sciences**, Vol. 10, Issue 10, pp. 1181-92, (2014) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of SPR using anti-SPR antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: mouse HEPA1-6 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-

Images

SPR antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SPR at approximately 28KD. The expected band size for SPR is at 28KD.