

## Mouse Sepiapterin Reductase (SPR) ELISA Kit | SPR elisa kit

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CATALOG #  
**AAA332256**

REACTIVITY  
**Mouse**

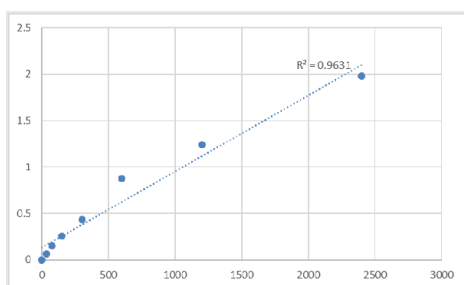
### PRODUCT SYNONYMS

Sepiapterin Reductase (SPR); Mouse Sepiapterin Reductase (SPR) ELISA Kit; SPR; SDR38C1; sepiapterin reductase; short chain dehydrogenase/reductase family 38C; member 1; SPR elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Reactivity              | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity             | Mouse Sepiapterin reductase (SPR) ELISA Kit has high sensitivity and excellent specificity for detection of Mouse SPR. No significant cross-reactivity or interference between Mouse SPR and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Sequence Length         | 262                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type              | Sandwich ELISA (Quantitative)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Samples                 | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Detection Method        | Colorimetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Usage Notes             | <ul style="list-style-type: none"> <li>* Do not mix components from different kit lots or use reagents beyond the kit expiration date.</li> <li>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.</li> <li>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.</li> <li>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.</li> <li>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.</li> <li>* It is recommended that all samples and standards be assayed in duplicate or triplicate.</li> </ul> |
| Preparation and Storage | Store at 2-8 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



**Standard Curve (Sample)**

Fig.1. Mouse Sepiapterin reductase (SPR) Standard Curve.

ADDITIONAL INFORMATION

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for SPR elisa kit | <p>Description: This Mouse Sepiapterin reductase (SPR) ELISA Kit employs a two-site sandwich ELISA to quantitate SPR in samples. An antibody specific for SPR has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any SPR present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SPR is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SPR bound in the initial step. The color development is stopped and the intensity of the color is measured.</p> <p>Background: Sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase; EC 1.1.1.153) catalyzes the NADPH-dependent reduction of various carbonyl substances, including derivatives of pteridines, and belongs to a group of enzymes called aldo-keto reductases. SPR plays an important role in the biosynthesis of tetrahydrobiopterin (BH4). The clone encoded a protein of 261 amino acids with a calculated molecular mass of 28,047 Da. The predicted amino acid sequence of human sepiapterin reductase shows 74% identity with the rat enzyme and a striking homology with human carbonyl reductase, estradiol 17-beta-dehydrogenase, and 3-beta-hydroxy-5-ene steroid dehydrogenase, especially in the N-terminal region.</p> |
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NCBI AND UNIPROT INFORMATION

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|----------------------------------|-----------------------|
| NCBI GI #                        | 160333789             |
| NCBI GeneID                      | 20751                 |
| NCBI Accession #                 | NP_035597             |
| NCBI GenBank Nucleotide #        | NP_035597.2           |
| UniProt Accession #              | Q64105                |
| NCBI Official Full Name          | sepiapterin reductase |
| NCBI Official Synonym Full Names | sepiapterin reductase |
| NCBI Official Symbol             | Spr                   |
| NCBI Official Synonym Symbols    | Gm10328; AA409688     |
| NCBI Protein Information         | sepiapterin reductase |
| UniProt Protein Name             | Sepiapterin reductase |
| UniProt Gene Name                | <b>Spr</b>            |
| UniProt Synonym Gene Names       | SPR                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/mouse-elisa-kits/sepiapterin-reductase-spr/332256>