

## 32-6914: SPR Mouse

**Alternative Name :** SDR38C1, SPR, Dystonia, Sepiapterin reductase, mCG\_128676.

### Description

Source: Escherichia Coli.

Sterile filtered colourless solution.

Sepiapterin Reductase is an aldo-keto reductase that catalyzes the NADPH-dependent reduction of pteridine derivatives and is essential in the biosynthesis of BH<sub>4</sub>. Mutations in Sepiapterin Reductase gene result in DOPA-responsive dystonia due to sepiapterin reductase deficiency defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. Sepiapterin reductase is part of the short-chain dehydrogenase/reductase family which reduces exogenous carbonyl compounds as well as phenylpropanedione. Sepiapterin reductase is an important enzyme for the biosynthesis of tetrahydrobiopterin, an necessary cofactor for aromatic amino acid hydrolases together with tyrosine hydroxylase, the rate-limiting enzyme in dopamine synthesis.

SPR Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 285 amino acids (1-262 a.a) and having a molecular mass of 30.3kDa. SPR is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** SPR protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH8.5), 1mM DTT and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSMEAGGLG CAVCVLTGAS RGFGALAPQ LARLLSPGSV  
MLVSARSESM LRQLKEELGA QQPDLKVLA AADLGTEAGV QRLLSAVREL PRPEGLQRLL LINNAATLGD  
VSKGFLNVND LAEVNNYWAL NLTSMLCLTS GTLNAFQDSP GLSKTVVNIS SLCALQPYKG WGLYCAGKAA  
RDMLYQVLAA EEPVSRVLSY APGPLDNDMQ QLARETSKDP ELRSKLQKLK SDGALVDCGT SAQKLLGLLQ  
KDTFQSGAHV DFYDC.