

32-2816: SPR Recombinant Protein

Alternative Name : SDR38C1,SPR,Dystonia,Sepiapterin reductase.

Description

Source : Escherichia Coli. Sepiapterin Reductase produced in E.Coli is a single,non-glycosylated polypeptide chain containing 281 amino acids (1-261 a.a.) and having a molecular mass of 30.2 kDa.Sepiapterin Reductase is expressed with a 20 amino acid His tag at N-Terminus and purified by proprietary chromatographic techniques. Sepiapterin Reductase is an aldo-keto reductase that catalyzes the NADPH-dependent reduction of pteridine derivatives and is essential in the biosynthesis of BH4. 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.

Product Info

Amount :	20 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	The SPR solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0) 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 MEGGLGRAVC LLTGASRGFG RTLAPLLASL LSPGSVLVLS ARNDEALRQL EAELGAERSG LRVVRVPADL GAEAGLQQLL GALRELPRPK GLQRLLINN AGSLGDVSKG FVDLSDSTQV NNYWALNLTS MLCLTSSVLK AFPDSPGLNR TVVNISSLCA LQPFKGWALY CAGKAARDML FQVLALEEPN VRVLNYAPGP LDTDMQQLAR ETSVDPDMRK GLQELKAKGK LVDCKVSAQK LLSLLEKDEF KSGAHVDFYD K.