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Cystathionine β Synthase, human recombinant protein

Beta-thionase, methylcysteine synthase, serine sulfhydrase

Catalog # PBV11403r

Specification

Cystathionine β Synthase, human recombinant protein - Product info

Primary Accession	P35520
Concentration	0.5
Calculated MW	61.9 kDa (1-551 aa, NT His Tag) KDa

Cystathionine β Synthase, human recombinant protein - Additional Info

Gene ID	102724560.
Gene Symbol	CBS

Other Names
Beta-thionase, methylcysteine synthase, serine sulfhydrase

Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥90%
Assay2&Purity2	N/A;
Recombinant	Yes
Results	100 U/mg
Sequence	1-551 aa

Target/Specificity
Cystathionine β Synthase

Format
Liquid

Storage
-20°C; 0.5 mg/ml in 50 mM Tris, 100 mM NaCl, pH 8.0 and 20% glycerol

Cystathionine β Synthase, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Cystathionine β Synthase, human recombinant protein - Images

Cystathionine β Synthase, human recombinant protein - Background

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Cystathionine β-synthase (CBS; E.C. 4.2.1.22) is a PLP-dependent enzyme which plays a central role in sulfur amino acid metabolism in eukaryotes. CBS catalyzes condensation between serine and homocysteine to generate cystathionine, which is then further processed by cystathionine γ-lyase to yield cysteine. The gene encoding CBS is essentially linked to the genetic disorders of homocystinuria and Down syndrome. Homocystinuria is an autosomal recessive disease, characterized by high plasma levels of homocysteine, with clinical manifestations including mental retardation, thromboembolism and connective tissue defects. In addition, CBS also mediates synthesis of hydrogen sulfide by catalyzing condensation between cysteine and homocysteine. CBS is highly expressed in the nervous system, liver and kidney and is responsible for up to 95% of the H2S production in the brain.

Cystathionine β Synthase, human recombinant protein - References

Kraus J.P.,et al.Hum. Mol. Genet. 2:1633-1638(1993).
Chasse J.-F.,et al.Biochem. Biophys. Res. Commun. 211:826-832(1995).
Kruger W.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:6614-6618(1994).
Chasse J.-F.,et al.Mamm. Genome 8:917-921(1997).
Kraus J.P.,et al.Genomics 52:312-324(1998).