

SIX6, 1-246aa, Human, His tag, E.coli

Cat.NO.: TP03951

3th Edition

Synonyms:SIX homeobox 6, MCOPCT2, Six9

Description:SIX6, also as known as OPTX2 and SIX9, belongs to the SIX/Sine oculis homeobox family contains 1 homeobox DNA-binding domain. The SIX homeobox protein is crucial in embryonic development by providing necessary instructions for the formation of the forebrain and eye development. This protein expressed in the developing and adult retina, hypothalamic and the pituitary regions. Defects in SIX6 are the cause of microphthalmia isolated with cataract type 2. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Recombinant human SIX6 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 40% glycerol, 5mM DTT, 2mM EDTA

Molecular Weight:30.1kDa (269aa) confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMFQLPILNFSPQQVAGVCETLEESGDVERLGRFLWSLPVAPAAACEALNKNE
SVLRARAIVAFHGGNYRELYHILENHKFTKESHAKLQALWLEAHYQEAELRGRPLGPVDKYRVRKKFPLPRTIWD
GEQKTHCFKERTRNLLREWYLQDPYPNPSKKRELAQATGLTPTQVGNWFKNRRQRDRAAAAKNRLQQQVLSQG
SGRALRAEGDGTPEVLGVATSPAASLSSKAATSAISITSSDSECDI

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.