

## Chemistry & Biochemistry Biochemistry Lab



## Biochem Lab Clone List - Info

**pTvMDH** - LDH with an MDH activity. Vector pQE31 N terminal His tag to MDH. Amp<sup>r</sup>. Cloned from Trichomonas vaginalis, T. vaginalis (NIH-C1 strain ATCC 3001) Sequence in GenBank accession nos AF070994. Reference Proc Natl Acad Sci Vol 96 pp. 6285 1999.

**pFLDH** – LDH from *Plasmodium falciparum* (cerebral malarial parasite) FEBS Journal 274 (2007) 2738-2748. Unique active-site properties from human LDH. Easy to crystalize. 6 His on the C terminus. pKK vector, expressed in JM109 or similar cells. Amp<sup>r</sup> Overnight culture in 2xYT (yeast tryptone media) without IPTG induction.

**pCaMDH** (A or B?) – MDH from the green bacteria, *Chloroflexus aurantiacus*. Cited in literature as pETMDH). Cloned into pET11a expression vector. Amp<sup>r</sup> Use BL21(DE3) for T7 expression. Arch Microbiol (1996) 165:346-353. Not His tagged, but easily purified. IPTG inducible.

**pgWMDH** – Glycoxysomal Watermelon protein Record P46488. Cloned into pQE60 Amp<sup>r</sup>. Cox et al. FEBS Journal 272 (2005) 643-654. No N terminal presequence. Find sequence and structure front his paper.

pMDH1 - Human cytosolic MDH

pMDH2 - Human Mitochondrial MDH DNA sequence found here (http://www.addgene.org/38792/sequences/) PDB file (2DFD)

**pLDH** – Human LDH

**pCS** – Human Citrate Synthase

WANT – ecoli and yeast or fish mdh.