

## 32-2124: ADH5 Recombinant Protein

**Alternative Name :** Alcohol dehydrogenase 5 (class III) chi polypeptide, Alcohol dehydrogenase class chi chain, Glutathione-dependent formaldehyde dehydrogenase, S-(hydroxymethyl) glutathione dehydrogenase, FDH, ADHX, ADH-3, FALDH, GSH-FDH, GSNOR, EC 1.1.1.1, EC 1.1.1.2

### Description

Source : E.coli. ADH5 Recombinant produced in E. coli is a single polypeptide chain containing 398 amino acids (1-374) and having a molecular mass of 42.3kDa. ADH5 is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. ADH5 belongs to the alcohol dehydrogenase family which metabolizes a large selection of substrates, such as retinol, ethanol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. ADH5 has practically no activity for ethanol oxidation, but displays high activity for oxidation of long-chain primary alcohols and for oxidation of S-hydroxymethyl-glutathione, a spontaneous adduct between glutathione and formaldehyde. ADH5 enzyme is a key factor of cellular metabolism for the removal of formaldehyde, a powerful aggravating and alerting mediator which causes pharyngitis, lacrymation, rhinitis and contact dermatitis.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 90% as determined by SDS-PAGE.  
**Content :** The ADH5 solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 100mM NaCl, 1mM DTT and 20% 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 SGLVPRGSH MGSHEMANEVI KCKAAVAWEA GKPLSIEEIE VAPPKAHEVR IKIATAVCH TDAYTLSGAD PEGCFPVILG HEGAGIVESV GEGVTKLKAG DTVIPLYIPQ CGECKFCLNP KTNLCQKIRV TQGKGLMPDG TSRFTCKGKT ILHYMGSTSF SEYTVVADIS VAKIDPLAPL DKVCLLGCGI STGYGAAVNT AKLEPGSVCA VFGLGGVGLA VIMGCKVAGA SRIIGVDINK DKFARAKEFG ATECINPQDF SKPIQEVLEI MTDGGVDYSF ECIGNVKVMR AALEACHKGW GSVVVGVA SGEIATRPF QLVTRGTWKG TAFGGWKSVE SVPKLVSEYM SKKIKVDEFV THNLSFDEIN KAFELMHSGK SIRTVVKI