

## **Product datasheet for TP724621**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **ALDH1A3 Human Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Human Aldehyde Dehydrogenase 1-A3/ALDH1A3 (N-His)

Species: Human

**Expression cDNA Clone** 

or AA Sequence:

Met1-Pro512

Tag: N-6His

**Buffer:** Lyophilized from a 0.2 um filtered solution of 20mM HEPES, 150mM KCl,1mM β-ME,0.5mM

EDTA,pH7.5.

**Note:** Recombinant Human Aldehyde Dehydrogenase 1-A3 is produced by E.coli. The target gene

encoding Met1-Pro512 is expressed with a 6His tag at the N terminus.

Stability: 12 months from date of despatch

**Locus ID:** 220 **UniProt ID:** P47895

**Summary:** Aldehyde dehydrogenase 1 family member A3 (ALDH1A3), also known as retinaldehyde

dehydrogenase 3 (RALDH3), is a member of the aldehyde dehydrogenase family known to metabolize a wide variety of aldehydes. ALDH1A3 specifically oxidizes retinal to retinoic acid (RA) and is differentially expressed in developing embryonic tissues and adult organs. It is required for the biosynthesis of normal levels of retinoic acid in the embryonic ocular and nasal regions The RA produced by ALDH1A3 in rodents contributes to the development of skin and hair follicles, brain, tooth buds, lungs, olfactory bulbs, kidneys, eyes, skeletal muscle and seminal vesicles. Recent studies showed ALDH1A3 could also be used as a marker of

cancer stem cells to predict metastasis or clinical prognosis in many cancers.

