



# Recombinant Protein Technical Manual

## Recombinant Human ALDH1A2 Protein (His Tag)

RPES2248

### Product Data:

**Product SKU:** RPES2248

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** O94788

### Protein Information:

**Molecular Mass:** 58.2 kDa

**AP Molecular Mass:** 50-65 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 7.5, 20% Glycerol.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Aldehyde dehydrogenase family 1 member A2; Retinaldehyde-specific dehydrogenase type 2; RALDH(II); Retinal dehydrogenase 2; ALDH1A2; RALDH2

## Immunogen Information:

**Sequence:** Met 1-Ser518

## Background:

Aldehyde dehydrogenase 1 family member A2 (ALDH1A2), also known as retinaldehyde dehydrogenase 2 (RALDH2), belongs to the aldehyde dehydrogenase family which contains two members, the ALDH1 s (ALDH1A1, ALDH1A2 and ALDH1A3) and the 9-cis retinaldehyde dehydrogenase ALDH8 s. ALDH1A2 is key enzyme that catalyzes the synthesis of retinoic acid (RA) from retinaldehyde. RA is a paracrine hormone signaling molecule that functions in developing and adult tissues. ALDH1A2 was also found to regulate normal and tumor cell growth and differentiation. Several studies showed that ALDH1A2 expression is increased after the appearance of AraC resistance in clinical cases which means this protein is effective in AraC resistance.