

## Product datasheet for PH325750

### ALDH3A1 (NM\_001135167) Human Mass Spec Standard

#### Product data:

|                                       |  |
|---------------------------------------|--|
| Product Type:                         | Mass Spec Standards  |
| Description:                          | ALDH3A1 MS Standard C13 and N15-labeled recombinant protein (NP_001128639) |
| Species:                              | Human  |
| Expression Host:                      | HEK293   |
| Expression cDNA Clone or AA Sequence: | RC225750   |
| Predicted MW:                         | 50.2 kDa   |
| Protein Sequence:                     | >RC225750 representing NM_001135167<br>Red=Cloning site Green=Tags(s)      |

MSKISEAVKRARAASFSSGRTRPLQFRIQQLEALQRLIQEQEQELVGALAADLHKNEWNAYYEEVVVYLEE  
IEYMIQKLPEWAADEPVEKTPQTQQDEL YIHSEPLGVVLVIGTWNYPFNLTIQPMVGAI AAGNSVVLKPS  
ELSENMASLLATIIPQYLDKDLYPVINGGVPETTELLKERFDHILYTGSTGVGKIIMTAAAKHLTPVTLE  
LGGKSPCYVDKNCDDL VACRRIAWGKFMNSGQTCVAPDYILCDPSIQNQIVEKLLKSLKEFYGEDAKKSR  
DYGRIISARHFQRMGLIEGQKVAYGGTGAATRYIAPTILTDVDPQSPVMQEEIFGPVLPVVCVRSLEE  
AIQFINQREKPLALYMFSSNDKVIKKMIAETSSGGVAANDVIVHITLHSLPFGGNGSGMGSYHGKKSFE  
TFSHRRSCLVRPLMNDEGLKVRYPSPAKMTQH

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

|                  |  |
|------------------|--|
| Tag:             | C-Myc/DDK  |
| Purity:          | > 80% as determined by SDS-PAGE and Coomassie blue staining  |
| Concentration:   | >0.05 µg/µL as determined by microplate BCA method   |
| Labeling Method: | Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine |
| Buffer:          | 25 mM Tris-HCl, 100 mM glycine, pH 7.3   |
| Storage:         | Store at -80°C. Avoid repeated freeze-thaw cycles.   |
| Stability:       | Stable for 3 months from receipt of products under proper storage and handling conditions.   |
| RefSeq:          | <u>NP_001128639</u>  |
| RefSeq ORF:      | 1359   |
| Synonyms:        | ALDH3; ALDHIII   |
| Locus ID:        | 218  |



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UniProt ID: [P30838](#)

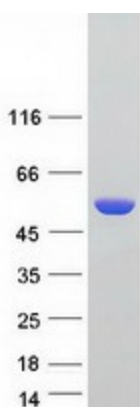
Cytogenetics: 17p11.2

**Summary:** Aldehyde dehydrogenases oxidize various aldehydes to the corresponding acids. They are involved in the detoxification of alcohol-derived acetaldehyde and in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. The enzyme encoded by this gene forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. It is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Sep 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism

### Product images:



Coomassie blue staining of purified ALDH3A1 protein (Cat# [TP325750]). The protein was produced from HEK293T cells transfected with ALDH3A1 cDNA clone (Cat# [RC225750]) using MegaTran 2.0 (Cat# [TT210002]).