

## Product datasheet for **AM05295PU-N**

### **AKR1C2 Mouse Monoclonal Antibody [Clone ID: T101]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	T101
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	<b>Immunohistochemistry.</b> <b>Immunofluorescence.</b> <b>Enzyme Immunoassay.</b> <b>Western blot</b> (1/250-1/500): Detects a 32 kDa band in human breast cancer tissue and Porcine liver tissue. <i>Positive Control:</i> Human breast cancer and Porcine liver tissue.
Reactivity:	Human, Mammalian, Mouse, Porcine
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Hybridoma produced by the fusion of splenocytes from mice immunized with recombinant type 2 Dihydrodiol Dehydrogenase from Human lung cancer and Mouse myeloma cells.
Formulation:	PBS containing 0.02% Sodium Azide as preservative. State: Liquid
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	aldo-keto reductase family 1, member C2
Database Link:	<a href="#">Entrez Gene 1646 Human P52895</a>



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**Background:**

DDH is a member of aldo-keto reductase superfamily (1,2), which catalyzes reduction of aldehyde or ketone to a corresponding alcohol by using NADH or NADPH as a cofactor. In liver, the enzyme is abundantly located in the cytoplasm as a monomeric 34-36 kDa protein (3,4). Interestingly, by differential display Shen et al. (5) has shown that overexpression of DDH could be identified in ethacrynic acid-induced drug-resistant human colon cancer cells. Detection of DDH overexpression in drug-resistant human stomach cancer cells, which were selected by the gradual adaptation to daunorubicin, further suggested that DDH might be associated with the drug-resistance in cancer cells (6). In a recent study, DDH expression was further shown to have prognostic significance in patients with NSCLC. By using an immunohistochemical method to determine DDH expression in surgical specimens, DDH expression was identified in patients with leukemia, lung cancer, esophageal cancer, transitional cancer and breast cancer. Furthermore, overexpression of DDH was confirmed by immunoblotting and in situ hybridization. Correlation between clinicopathological parameters and DDH expression as well as the prognostic significance of DDH expression in patients with advanced cancer was indicated.

**Synonyms:**

3-alpha-HSD3, Dihydrodiol dehydrogenase 2

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Metabolism of xenobiotics by cytochrome P450

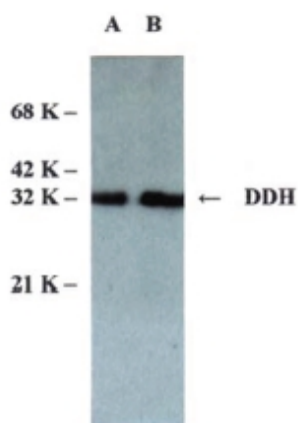
**Product images:**

Figure 2. Western blot analysis using DDH antibody (AM05295PU-N) on porcine liver (A) and breast cancer (B).

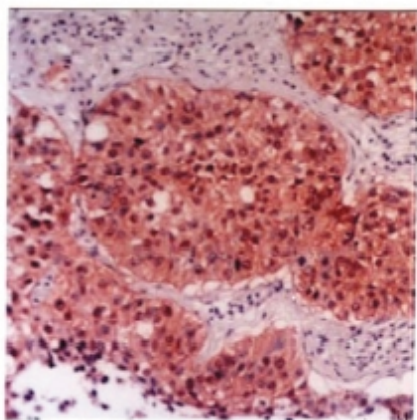


Figure 1. Immunoperoxidase staining of formalin-fixed paraffin embedded human lung cancer tissue showing cytoplasmic localization of dihydrodiol dehydrogenase.