



Aldehyde Dehydrogenase in Cancer

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Message from the Guest Editors

Dear colleagues,

Aldehyde dehydrogenase (ALDH) plays important roles in multiple biological processes, such as the oxidation of biogenic and xenogenic aldehydes to carboxylic acids (including the detoxification of alcohol-derived acetaldehyde), the formation of retinoic acid, oxidative stress responses, and cell differentiation. In humans, the ALDH family comprises 19 isoenzymes which are localized in the cytoplasm, mitochondria, nucleus, and endoplasmic reticulum, active in the majority of mammalian tissues. Mutations and polymorphisms in ALDH genes lead to losses of function that are involved in a variety of diseases, such as cardiovascular diseases, diabetes, obesity, neurodegenerative diseases, stroke, and also malignant diseases. The high expression of ALDHs found in various neoplastic tissues suggests that these enzymes play a key role in the progression, differentiation, and survival of cancer cells.

In this Special Issue, we welcome original research and literature reviews discussing various aspects of ALDHs in relation to tumorigenesis to summarize and enlarge our understanding of the meaning of ALDHs in cancer diseases.





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Message from the Editor-in-Chief

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