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IDH Gene Family

National Cancer Institute

Source

National Cancer Institute. *IDH Gene Family*. NCI Thesaurus. Code C129260.

A family of genes that encode enzymes that catalyze the decarboxylation of isocitrate yielding alpha-ketoglutarate and carbon dioxide. Alpha-ketoglutarate is a precursor used in the synthesis of alanine, glutamine and pyruvate, and is an important intermediate in the citric acid cycle, which is an essential metabolic pathway used by cells to produce energy through aerobic respiration. Mutations in the IDH1 and IDH2 genes are associated with several types of brain tumors.