

Match Overview

1	Crossref 38 words Ya-Mei Wang. "Succinate dehydrogenase-deficient gastrointestinal stromal tumors", <i>World Journal of Gastroenterology</i> , 20	1%
2	Internet 17 words crawled on 20-Jan-2020 fp.amegroups.cn	<1%

Name of Journal: *World Journal of Gastroenterology*

Manuscript NO: 56734

Manuscript Type: REVIEW

Role of succinate dehydrogenase deficiency and oncometabolites in gastrointestinal stromal tumors

Yue Zhao, Fei Feng, Qing-Hong Guo, Yu-Ping Wang, Rui Zhao

Abstract

Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract. On the molecular level, GISTs can be categorized into two groups based on the causative oncogenic mutations. Approximately 85% of GISTs are

Succinate dehydrogenase deficiency in gastrointestinal



ALL

IMAGES

VIDEOS

23,900 Results

Any time ▾

Succinate dehydrogenase-deficient gastrointestinal stromal ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4342905>

Feb 28, 2015 · Core tip: **Succinate dehydrogenase (SDH) deficiency** occurs in about 5%-7.5% of **gastrointestinal stromal tumors (GISTs)**. These so-called SDH-deficient GISTs lack KIT and PDGFRA mutations. Such type of GISTs has its own clinical, morphological and molecular characteristics. The accumulation of hypoxia-inducible factor 1 α and the upregulation of its ...

Cited by: 20

Author: Ya-Mei Wang, Meng-Li Gu, Feng Ji

Publish Year: 2015

SUCCINATE DEHYDROGENASE DEFICIENT GASTROINTESTINAL ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112081>

SDH-deficient GIST implies a **gastrointestinal stromal tumor** that has a loss of **succinate dehydrogenase complex function** as the **oncogenic mechanism**, instead of KIT or PDGFRA-activating mutations, as seen in a great majority of GISTs in general.

Cited by: 100

Author: Markku Miettinen, Jerzy Lasota

Publish Year: 2014

Succinate dehydrogenase deficiency is associated with ...

<https://www.nature.com/articles/modpathol201386>

Jun 07, 2013 · Mason, E., Hornick, J. **Succinate dehydrogenase deficiency** is associated with decreased 5-hydroxymethylcytosine production in **gastrointestinal stromal tumors**: implications for mechanisms of ...

Cited by: 70

Author: Emily F Mason, Jason L Hornick

Publish Year: 2013

JCI - Oncometabolites: linking altered metabolism with cancer

<https://www.jci.org/articles/view/67228> ▾

Mutations in genes encoding **SDH subunits** as well as the **SDH assembly** factor 2 occur frequently in PGL/PCC. but have also been identified in other types of **tumors** such as **gastrointestinal**



ALL

IMAGES

VIDEOS

25,200 Results

Any time ▾

[SUCCINATE DEHYDROGENASE DEFICIENT ...](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112081)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112081>

SDH-loss causes **succinate accumulation and activation of pseudohypoxia signaling via overexpression of HIF-proteins**. Activation of insulin-like growth factor 1-signaling is also typical of these tumors. SDH-deficient GISTs are a unique group of GISTs with an energy metabolism defect as the key oncogenic mechanism.

Cited by: 106

Author: Markku Miettinen, Jerzy Lasota

Publish Year: 2014

[Succinate dehydrogenase deficient gastrointestinal stromal ...](https://pubmed.ncbi.nlm.nih.gov/24886695)

<https://pubmed.ncbi.nlm.nih.gov/24886695>

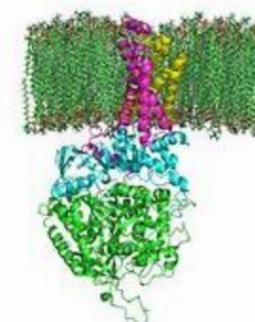
Loss of function of the **succinate dehydrogenase** complex characterizes a rare group of human **tumors** including some **gastrointestinal stromal tumors**, paragangliomas, renal carcinomas, and pituitary adenomas, and these can all be characterized as SDH-deficient **tumors**...

Cited by: 106

Author: Markku Miettinen, Jerzy Lasota

Succinate dehydrogenase

Enzyme Complex



Succinate dehydrogenase or succinate-coenzyme Q reductase or respiratory Complex II is an enzyme complex,

found in many bacterial cells and in the inner mitochondrial membrane of eukaryotes. It is the only enzyme that participates in both the citric acid cycle and the electron transport chain. Histochemical analysis showing high succinate



Role of succinate dehydrogenase deficiency and oncometabolites ir



ALL IMAGES VIDEOS MAPS NEWS SHOPPING

26,300 Results Any time

SUCCINATE DEHYDROGENASE DEFICIENT GASTROINTESTINAL ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112081>

SDH-loss causes **succinate accumulation and activation of pseudohypoxia signaling via overexpression of HIF-proteins**. Activation of insulin-like growth factor 1-signaling is also typical of these tumors. SDH-deficient GISTs are a unique group of GISTs with an energy metabolism defect as the key oncogenic mechanism.

Cited by: 109 **Author:** Markku Miettinen, Jerzy Lasota
Publish Year: 2014

Succinate dehydrogenase-deficient gastrointestinal stromal ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4342905>

Feb 28, 2015 · Role of succinate dehydrogenase deficiency in the tumorigenesis of succinate dehydrogenase-deficient gastrointestinal stromal tumors. **SDH complex dysfunction within mitochondria leads to increased levels of succinate, which in turn inhibits PHD activity...** POSSIBLE MECHANISM OF TUMORIGENESIS IN SDH-DEFICIENT GISTS DRIVEN BY IGF1R

Cited by: 22 **Author:** Ya-Mei Wang, Meng-Li Gu, Feng Ji
Publish Year: 2015

Succinate dehydrogenase deficient gastrointestinal stromal ...

<https://pubmed.ncbi.nlm.nih.gov/24886695>

Loss of function of the **succinate dehydrogenase** complex characterizes a rare group of human **tumors** including some **gastrointestinal stromal tumors**, paragangliomas, renal carcinomas, and pituitary adenomas, and these can all be characterized as SDH-deficient **tumors...**

Cited by: 109 **Author:** Markku Miettinen, Jerzy Lasota
Publish Year: 2014

Images of role of Succinate dehydrogenase deficiency and Oncom...

bing.com/images



Succinate dehydrogenase

Enzyme Complex



Succinate dehydrogenase or succinate-coenzyme Q reductase or respiratory Complex II is an enzyme complex, found in many bacterial cells and in the inner mitochondrial membrane of eukaryotes. It is the only enzyme that participates in both the citric acid cycle and the electron transport chain. Histochemical

analysis showing high succinate dehydrogenase in muscle demonstrates high mitochondrial content and high oxidative potential.

Wikipedia

Data from: Wikipedia

[Suggest an edit](#)