# **Ornithine decarboxylase**

### NCBI gene summary

This gene encodes the rate-limiting enzyme of the polyamine biosynthesis pathway which catalyzes ornithine to putrescine. The activity level for the enzyme varies in response to growth-promoting stimuli and exhibits a high turnover rate in comparison to other mammalian proteins. Originally localized to both chromosomes 2 and 7, the gene encoding this enzyme has been determined to be located on 2p25, with a pseudogene located on 7q31-qter. [provided by RefSeq]

Three antibodies: ODC1-1, ODC1-2 and ODC1-3 were tested and all antibodies were approved for IHC. ODC1-1 was selected for full protein profiling.

# ODC1-1 (CAB035996)



# Immunohistochemistry

**IHC protocol:** HIER pH 6, Dilution 1:120 **IHC test staining:** General cytoplasmic staining, strong in e.g. intestine, liver and pancreas.

#### **IHC Annotators comments**

Most of the normal and malignant cells displayed moderate to strong cytoplasmic immunoreactivity. Pancreatic islets, urothelia, breast, epidermal cells, cells in seminiferus duct, cells of CNS and lymphoid tissues were negative or weakly stained. Among malignant cells, many malignant gliomas, lymphomas, carcinoids, melanomas, thyroid, skin, testis, urothelial and stomach cancers were negative or weakly stained.



# Immunofluorescence

**IF Overlay**: antibody (green), anti-tubuline (red) and DAPI (blue) **IF Localisation**: Staining of cytoplasm and plasma membrane in all three cell lines with additional staining of endoplasmic reticulum in A-431.

**IF Validation:** Subcellular localization partly supported by literature or where no literature is available.



## Western blot

**WB Size markers (kDa)**: 230, 130, 95, 72, 56, 36, 28, 17, 11 **WB Lanes:** Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

WB Target weight (kDa): 51, 8, 5

**WB Validation:** Supportive (Band of predicted size in kDa (+/-20%) with additional bands present)