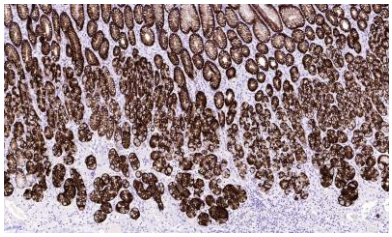
Anti-CA9, rabbit monoclonal (BSR2)

BSH-3018-100 (0.1 ml), BSH-3018-1 (1 ml)

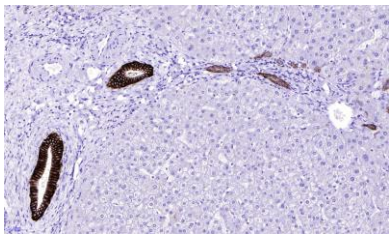
Clonality:	Rabbit monoclonal antibody
Clone:	BSR2
Application:	IHC-P (1:100 – 1:400)
Species Reactivity:	Human
Control tissues:	Gastric epithelia, liver
Alias names:	CAIX, Carbonic anhydrase 9
Buffer:	TRIS with 0.03% sodium azide, pH 7.2
Storage:	Store at 4°C



Gastric mucosa section has been stained using CA9 optibody (Clone: BSR2) with 1:200 dilution. Foveolar epithelium of gastric tissue is strongly stained.

Description

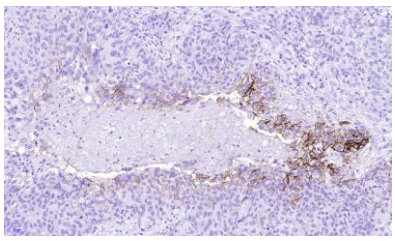
Carbonic anhydrase 9 (CA9) is a member of the zinc metalloenzymes that catalyse the reversible hydration of carbon dioxide and is anchored to cell membrane. CA9 is expressed in human gastrointestinal tract, chiefly in stomach, and bile ducts of liver. In neoplasia, high expression levels have been reported in different carcinomas, especially in clear-cell renal cell carcinoma. CA9 is also upregulated in hypoxia.



Liver section has been stained using CA9 optibody (Clone: BSR2) with 1:200 dilution. Bile duct epithelium has strong to moderate staining reaction.

Protocol

1. Deparaffinize and rehydrate tissue section
2. Wash: aqua dest, 2×5 min
3. Pre-treatment: PT-module HIER pH 9.0 (20min at 98°C)
4. H_2O_2 (concentration 3%), 10 min
5. Wash: PBS or TBS buffer, 2×5 min
6. Primary antibody diluted as recommended, 30 min
7. Wash: PBS or TBS buffer, 2×5 min
8. One step HRP-polymer detection, 30 min
9. Wash: PBS or TBS buffer, 2×5 min
10. DAB Substrate, 8 min
11. Wash: aqua dest, 2×2 min
12. Counterstain, dehydrate and coverslip



Breast carcinoma has been stained using CA9 optibody (Clone: BSR2) with 1:200 dilution. Cells with tumor hypoxia have moderate to strong CA9 positivity.

Dilution of concentrated antibody depends on the pre-treatment method and detection system used. Above protocol used in Optibodies evaluation and is meant as a reference. Final working dilution and protocol applied needs to be determined by the user always.