

Conclusion

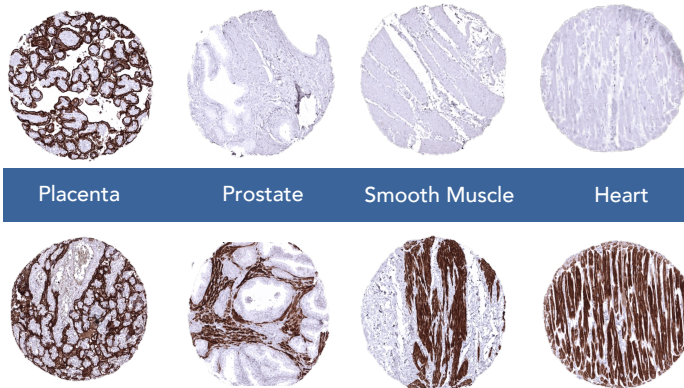
The main conclusion of Reiswich et al. with respect to utility of PLAP expression analysis:

PLAP is frequently expressed in germ cell tumors and can be used for ascertaining this diagnosis as a part of a panel.

PLAP can be expressed – even at high levels! – in various other cancers including gynecologic, urothelial, gastrointestinal and biliopancreatic carcinomas.

The antibody MSVA-350R has been validated by Reiswich et al. according to the guidelines of the International working group of antibody validation (IWGAV) which requests orthogonal validation and/or a comparison with a different independent antibody for antibodies to be used on formalin fixed tissues.¹ Key figures of this validation (comparison of antibodies) are shown below.

MSVA - 350R

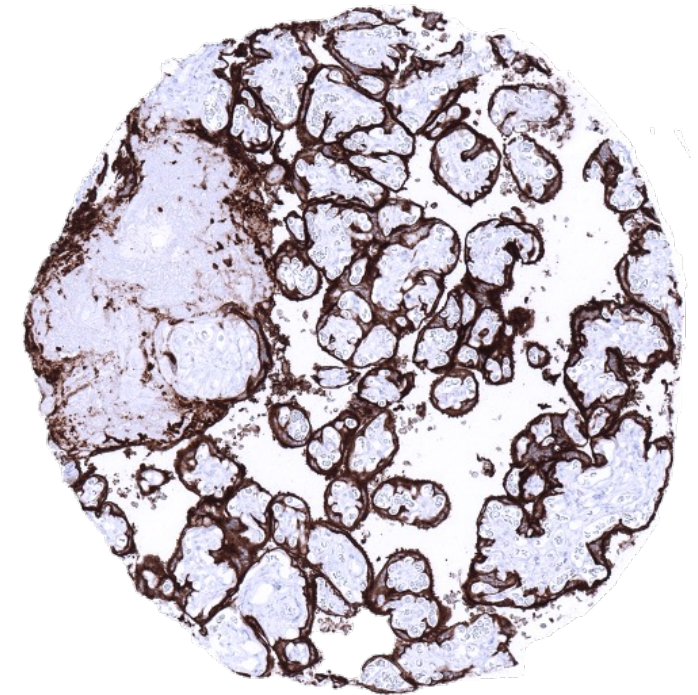


Validation Antibody

¹ Uhlen, M., Bandrowski, A., Carr, S. et al. A proposal for validation of antibodies. *Nat Methods* 13, 823–827 (2016).

PLAP MSVA - 350R

Publication Summary



Placenta

In normal tissues, PLAP expression is limited to placenta, endocervix, endometrium, and fallopian tube.

Published by Reiswich et al. In the journal of Pathology: Clinical Research, August 7th 2021

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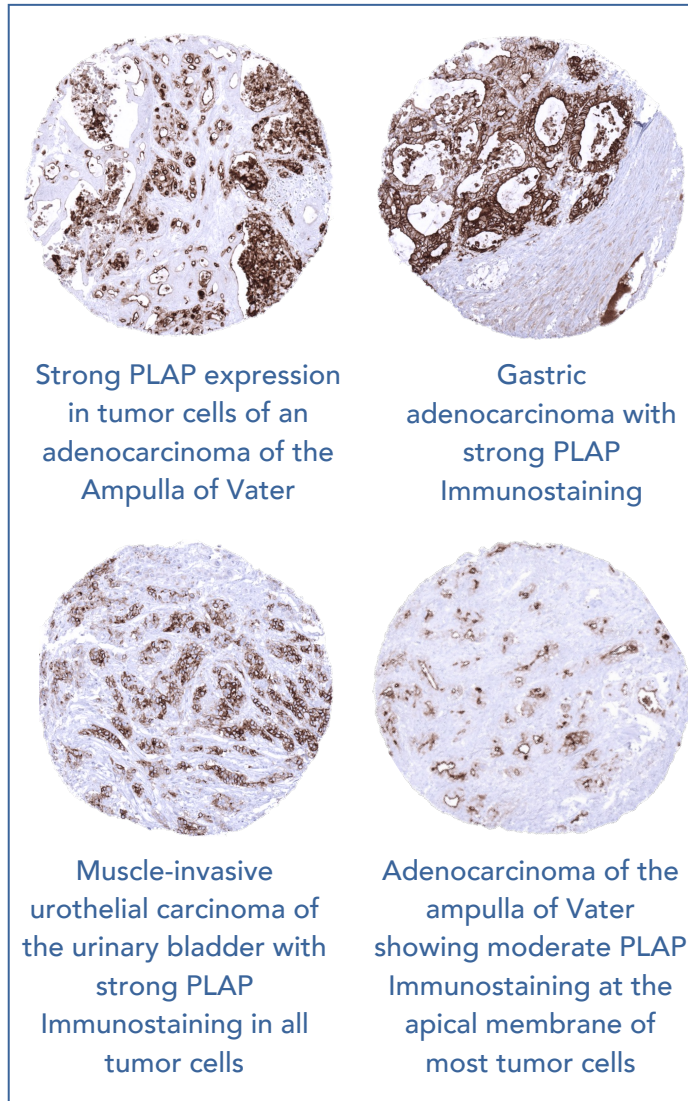
www.ms-validatedantibodies.com

Pattern of placental alkaline phosphatase (PLAP) expression in human tumors: a tissue microarray study on 12,381 tumors.

Reiswich et al. In the journal of Pathology: Clinical Research, 2021;7(6):577-589.

The analysis of 12,381 tumors from 131 different tumor categories revealed at least one case with a positive PLAP staining in 48 (36.6%) and at least one case with a strong PLAP staining in 22 (16.8%) of 131 tumor categories. Of note, PLAP expression does not occur in leiomyomatous tumors (previous reports on this subject were driven by cross-reactivity of other PLAP antibodies).

Other tumor entities with occasional PLAP positivity in male patients especially include urothelial carcinomas, gastrointestinal and biliopancreatic adenocarcinomas.

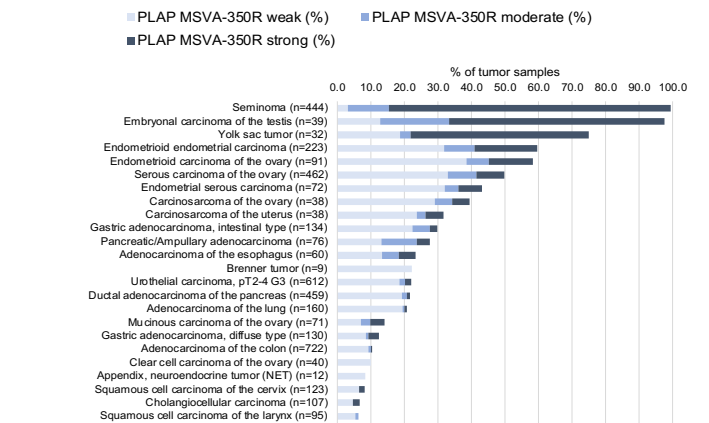


The distribution of positive staining results is shown in an "organ-systematic" and in a "ranking order" below (data from Reiswich et al. summarized in own graphics).

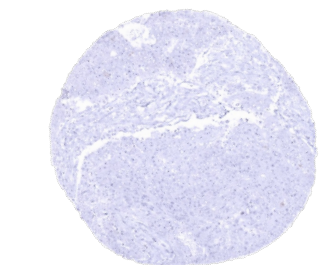
Organ Systematic Figure



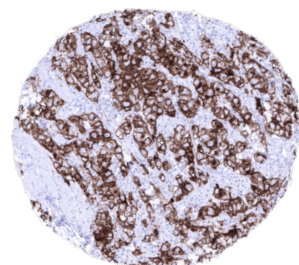
Ranking Order



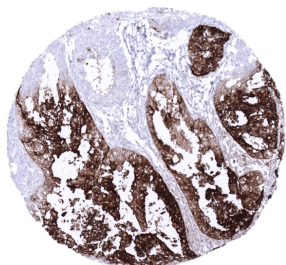
Note: MSVA-350R is for Research Use only
not approved for use in diagnostics



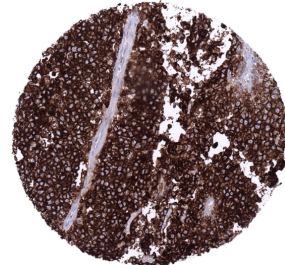
PLAP negative high grade serous carcinoma



Seminoma with strong PLAP Immunostaining in all tumor cells



Endometrioid endometrium carcinoma with intense PLAP immunostaining in >70% of tumor cells



Embryonal carcinoma of the testis exhibiting strong PLAP Immunostaining in all tumor cells