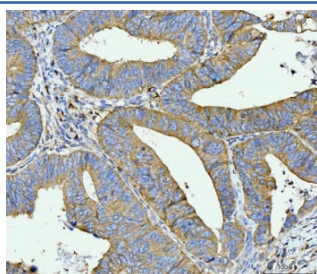


## ACSL4 Antibody / FACL4 [clone 4I7] (RQ6748)

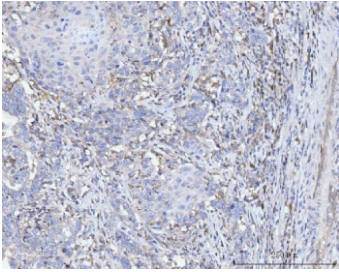
| Catalog No. | Formulation   | Size   |
|-------------|---|--------|
| RQ6748      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

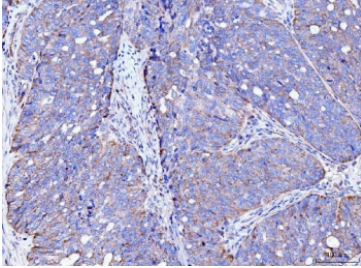
|                           |   |
|---------------------------|---|
| <b>Availability</b>       | 1-3 business days   |
| <b>Species Reactivity</b> | Human   |
| <b>Format</b>             | Purified  |
| <b>Clonality</b>          | Monoclonal (mouse origin)   |
| <b>Isotype</b>            | Mouse IgG1  |
| <b>Clone Name</b>         | 4I7   |
| <b>Purity</b>             | Affinity purified   |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose   |
| <b>UniProt</b>            | O60488  |
| <b>Localization</b>       | Cytoplasmic   |
| <b>Applications</b>       | Western Blot : 1-2ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml<br>Immunofluorescence (FFPE) : 5ug/ml<br>Flow Cytometry : 1-3ug/million cells |
| <b>Limitations</b>        | This ACSL4 antibody is available for research use only.   |



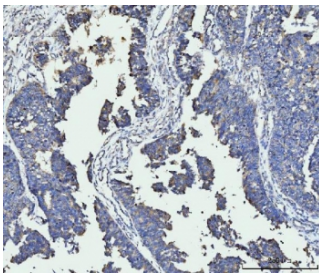
IHC staining of FFPE moderately differentiated adenocarcinoma of human rectum tissue with ACSL4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



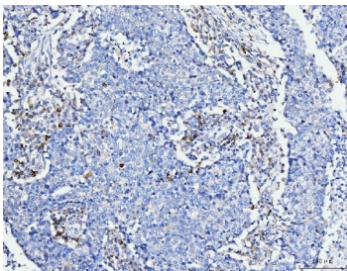
IHC staining of FFPE metaplasia of squamous cells of the renal pelvis tissue with ACSL4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



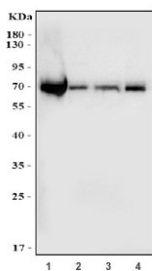
IHC staining of FFPE human ovarian cancer tissue with ACSL4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



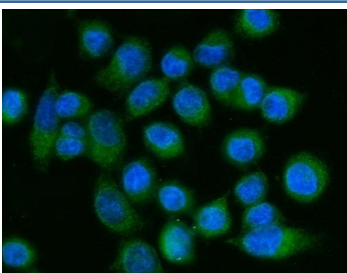
IHC staining of FFPE human bladder epithelial carcinoma tissue with ACSL4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



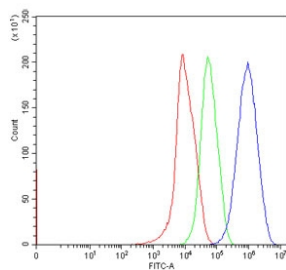
IHC staining of FFPE human lung cancer tissue with ACSL4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HepG2, 2) PC-3, 3) HeLa and 4) Caco-2 cell lysate with ACSL4 antibody. Predicted molecular weight: ~80 kDa (long form), ~74 kDa (short form).



Immunofluorescent staining of FFPE human SiHa cells with ACSL4 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human HepG2 cells with ACSL4 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ACSL4 antibody.

## Description

Long-chain-fatty-acid--CoA ligase 4 is an enzyme that in humans is encoded by the ACSL4 gene. It is mapped to Xq23. The protein encoded by this gene is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation. This isozyme preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the cognitive disability or Alport syndrome. Alternative splicing of this gene generates multiple transcript variants.

## Application Notes

Optimal dilution of the ACSL4 antibody should be determined by the researcher.

## Immunogen

Amino acids EPWTPETGLVTDAFKLKRKELR from the human protein were used as the immunogen for the ACSL4 antibody.

## Storage

After reconstitution, the ACSL4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.