

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ICA1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human ICA1 Ser2-Ala482 Accession # ABW03414
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

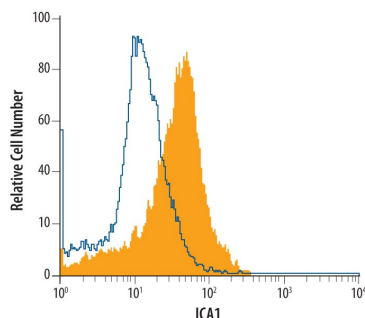
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human ICA1
<b>Immunohistochemistry</b>	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human pancreatic cancer tissue subjected to Antigen Retrieval Reagent-Basic (Catalog # <a href="#">CTS013</a> )
<b>Intracellular Staining by Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

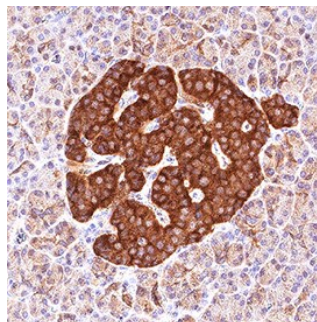
## DATA

### Intracellular Staining by Flow Cytometry



**Detection of ICA1 in A172 Human Cell Line by Flow Cytometry.** A172 human glioblastoma cell line was stained with Goat Anti-Human ICA1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4084, filled histogram) or isotype control antibody (Catalog # [AB-108-C](#), open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # [F0107](#)). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

### Immunohistochemistry



**ICA1 in paraffin-embedded human pancreas.** ICA1 was detected in immersion fixed paraffin-embedded sections of human pancreas using Goat Anti-Human ICA1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4084) at 0.5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (red; Catalog # [VC004](#)) and counterstained with hematoxylin (blue). Specific staining was localized to islets of Langerhans.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defroster and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Islet Cell Autoantigen 1 (ICA1), also known as ICA 69 kDa (ICA69), is a cytosolic protein that is associated with the Golgi complex and with immature secretory granules. Its N-terminal region shares similarity with arfaptins (ADP-ribosylation factor-interacting-proteins), suggesting that ICA1 likely plays a role in membrane trafficking. Human ICA-1 is a 483 amino acids (aa) protein. As a result of aa insertions, deletions and substitutions, multiple isoforms exist. Human ICA-1 shows 89% and 94% aa identity to mouse and canine ICA-1, respectively.