

## 36-2409: Anti-GP2 (Glycoprotein 2) / ZAP75 Monoclonal Antibody(Clone: GP2/1712)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	GP2/1712
<b>Application :</b>	ELISA, WB, IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	GP2
<b>Gene ID :</b>	2813
<b>Uniprot ID :</b>	P55259
<b>Alternative Name :</b>	Glycoprotein 2 (zymogen granule membrane); GP2; Pancreatic zymogen granule membrane associated protein GP2; Pancreatic zymogen granule membrane protein GP-2; ZAP75
<b>Isotype :</b>	Mouse IgG2b, lambda
<b>Immunogen Information :</b>	Recombinant fragment of human GP2 protein (around aa 35-179) (exact sequence is proprietary)

### Description

GP2 (glycoprotein 2), also known as ZAP75, is a 537 amino acid secreted protein. It is an integral membrane protein that is secreted from intracellular zymogen granules and associates with the plasma membrane via glycosylphosphatidylinositol (GPI) linkage. GP2 is cleaved and then released into the pancreatic duct along with exocrine secretions. GP2 binds pathogens such as enterobacteria, thereby playing an important role in the innate immune response. The C-terminus of this protein is related to the C-terminus of the protein encoded by the neighboring gene, uromodulin (UMOD). GP2 is also expressed on the apical plasma membrane of specialized microfold (M) cells among enterocytes and serves as a transcytotic receptor for mucosal antigens. M cells are considered a promising target for oral vaccination against various infectious diseases.

### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

### Application Note

ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes);

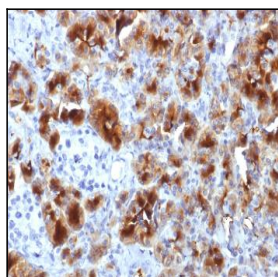


Fig. 1: Formalin-fixed, paraffin-embedded human Pancreas stained with GP2 Mouse Monoclonal Antibody (GP2/1712).

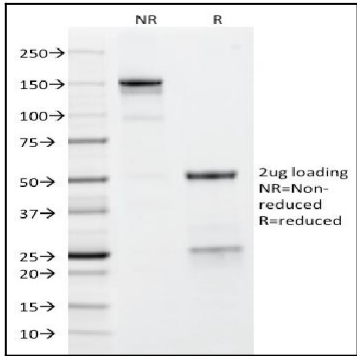


Fig. 2: SDS-PAGE Analysis Purified GP2 Mouse Monoclonal Antibody (GP2/1712). Confirmation of Integrity and Purity of Antibody.

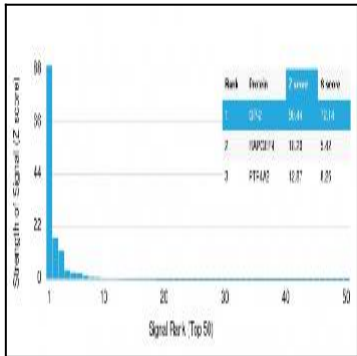


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using GP2 Mouse Monoclonal Antibody (GP2/1712) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.