Abundant Life Through Restfulness





COMPANY PROFILE

Restalyst, a member of the Reste Group, is a privately-owned biomedical clinical diagnostic company from Singapore with a regional presence in Asia.

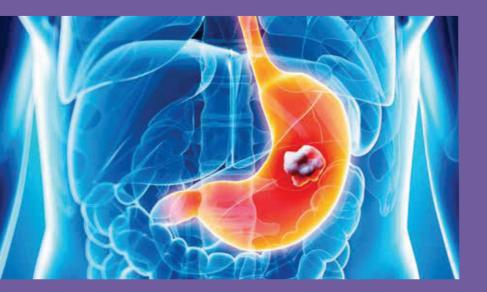
Established in 2007, Restalyst is a trusted provider of innovative, reliable and clinically-proven diagnostic solutions to the medical and healthcare industry. We are a fully integrated company that generates the full product pipelines from scientific research to in-house developmental work of patented technology. Our key products include immunoassays for early diagnosis and sensitive detection of oncology, infectious, neurodegenerative and other diseases. Our R&D and production facilities are certified for compliance to EN ISO13485:2012.

We are committed to our mission of harnessing technological advancements for the improvement of disease diagnosis and management of patient health. Through various collaborations with healthcare professionals and institutions globally, our dynamic team continuously pushes the boundaries of R&D to produce quality diagnostic solutions that are of high accuracy and sensitivity.



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GC-REAAD™ITIH3

Gastric Carcinoma Recombinant Antigen-Antibody Detection

HIGHLIGHTS:





Inter-assay Precision:	<10%
Intra-assay Precision:	<10%
Sample Type:	Plasma
Assay Duration (Approx.):	2 hours
Patient Sample Volume:	<10 μL
Shelf Life:	12 months
Certification:	CE-IVD Certified HSA (Singapore) Registered

PRODUCT DESCRIPTION:

Restalyst GC-REAAD™ ITIH3 is an *in-vitro* diagnostic intended for the qualitative and semi-quantitative detection of Inter-alpha-trypsin inhibitor heavy chain H3 (ITIH3) protein in human plasma for early detection of gastric carcinoma. ITIH3 protein, a patented technology, was found to be expressed at high levels in the plasma of gastric carcinoma patients which is not affected by the gastritis status or *H.pylori* infection.

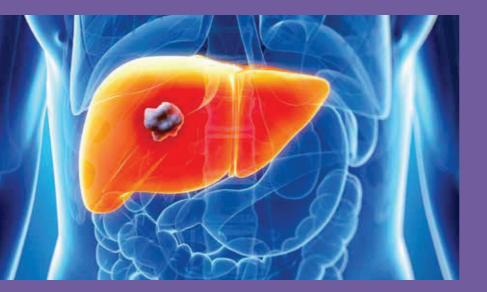
GC-REAAD™ determines the patients' risk level of gastric carcinoma, either positive or negative, by using an arbitrary unit of measurement known as REAAD™-units (RU).

PRINCIPLE:

Capture antibodies specific to ITIH3 protein are coated on the microwell. ITIH3 proteins present in the human plasma will form antigen-antibody complexes with the capture antibodies. Detection antibodies are introduced for the coupling with complexes. Secondary antibodies conjugated with horseradish peroxidase (HRP) are added to bind to the detection antibodies. A substrate solution (TMB) is added and is converted by the enzyme to a detectable form (color signal). The intensity of this colored product is directly proportional to the concentration of antigen present in the original specimen. Microwells can be read on any suitable spectrophotometer or ELISA reader.

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HCC-REAAD™ERBB3

Hepatocellular Carcinoma Recombinant Antigen-Antibody Detection Algorithm incorporating ERBB3 & AFP

HIGHLIGHTS:





Inter-assay Precision:	<10%
Intra-assay Precision:	<10%
Sample Type:	Serum / Plasma
Assay Duration (Approx.):	2.0 hours
Patient Sample Volume:	<10 μL
Certification:	CE-IVD Certified

PRODUCT DESCRIPTION:

Restalyst HCC-REAAD™ ERBB3 is an *in-vitro* diagnostic intended for the qualitative and semi-quantitative detection of Receptor tyrosine-kinase erbB-3 (also known as HER-3) in human serum/plasma for early detection of hepatocellular carcinoma. ERBB3 protein (patented) is discovered to have elevated concentration levels in the serum/plasma of hepatocellular carcinoma patients.

A new Algorithm (binary logistics regression) incorporating the use of ERBB3 and existing marker AFP improves the efficancy of diagnosis which is lacking in the conventional routine screening using AFP alone.

PRINCIPLE:

Capture antibodies specific to ERBB3 protein are coated on the microwell. ERBB3 proteins present in the human serum/ plasma will form antigen-antibody complexes with the capture antibodies. Biotinylated detection antibodies are introduced for the coupling with complexes. Secondary antibodies conjugated with horseradish peroxidase (HRP) are added to bind to the detection antibodies. A substrate solution (TMB) is added and is converted by the enzyme to a detectable form (color signal). The intensity of this colored product is directly proportional to the concentration of antigen present in the original specimen. Microwells can be read on any suitable spectrophotometer or ELISA reader.

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NPC-REAAD™

Nasopharyngeal Carcinoma Recombinant Antigen-Antibody Detection

HIGHLIGHTS:





Inter-assay Precision:	2.99% – 3.65%
Intra-assay Precision:	3.15% – 3.17%
Sample Type:	Serum / Plasma
Assay Duration (Approx.):	1.5 hours
Patient Sample Volume:	<10 μL
Shelf Life:	13 months
Certification:	CE-IVD Certified HSA (Singapore) Registered

PRODUCT DESCRIPTION:

Restalyst NPC-REAAD™ is an *in-vitro* diagnostic intended for the qualitative and semi-quantitative detection of IgA antibodies in human serum/plasma. The test utilises specific proteins of Epstein-Barr virus (EBV) to aid in the diagnosis of nasopharyngeal carcinoma (NPC) by detecting the patient's EA (Early Antigen) IgA antibody response in serum/plasma. These highly specific EBV proteins, generated using DNA recombinant technology, are known to be associated with nasopharyngeal carcinoma.

NPC-REAAD™ determines the patients' risk level of nasopharyngeal carcinoma, either positive or negative, by using an arbitrary unit of measurement known as REAAD™-units (RU).

PRINCIPLE:

Recombinant NPC antigens are coated on microwells. Specific antibodies (human IgA against EBV EA proteins) will bind with the immobilised antigens, forming antigen-antibody complexes. Excess antibodies are removed through subsequent washing steps. Secondary antibodies conjugated with horseradish peroxidase (HRP) are added to bind to the complexes. A substrate solution (TMB) is added and is converted by the enzyme to a detectable form (color signal). The intensity of this colored product is directly proportional to the concentration of antigen present in the original specimen. Microwells can be read on any suitable spectrophotometer or ELISA reader.

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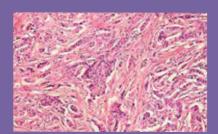


WBP2 IHC

INTENDED USE:

Immunohistochemistry detection of WW Domain Binding Protein 2 (WPB2) in breast cancer subtype and other human solid tumours for evaluation of diagnostic and prognostic values.

- * FOR RESEARCH USE ONLY
- * NOT FOR USE IN DIAGNOSTIC PROCEDURES
- * NOT FOR HUMAN OR ANIMAL CONSUMPTION



Immunohistochemistry of WBP2 monoclonal antibody on breast cancer tissues

PRODUCT DESCRIPTION:

Restalyst WBP2 IHC is intended for immunohistochemistry detection of WBP2 in breast cancer subtype and other human solid tumours. Overexpression of WBP2 in breast cancer specimens correlates with malignant progression and poor patient survival.

WBP2 is composed of 38 to 40 semiconserved amino acids shared by proteins of diverse functions including structural, regulatory and signalling protein. It is also involved in mediating protein-protein interactions through the binding of polyproline ligands, which bind to the WW domain of Yes Kinase-associated protein by its PY motifs.

BIBLIOGRAPHY:

- 1. Chen Y, Choong L, Lin Q et al. Differential Expression of Novel Tyrosine Kinase Substrates during Breast Cancer Development. Molecular & Cellular Proteomics. 2007;6(12):2072-2087. doi:10.1074/mcp.m700395-mcp200.
- 2. Lim S, Orhant-Prioux M, Toy W, Tan K, Lim Y. Tyrosine phosphorylation of transcriptional coactivator WW-domain binding protein 2 regulates estrogen receptor function in breast cancer via the Wnt pathway. The FASEB Journal. 2011;25(9):3004-3018. doi:10.1096/fj.10-169136.
- 3. Chan S, Lim C, Huang C et al. WW domain-mediated interaction with Wbp2 is important for the oncogenic property of TAZ. Oncogene 2010;30(5):600-610. doi:10.1038/onc.2010.438.
- 4. Lim S, Lu S, Kang S et al. Wnt Signaling Promotes Breast Cancer by Blocking ITCH-Mediated Degradation of YAP/TAZ Transcriptional Coactivator WBP2. Cancer Research. 2016. doi:10.1158/0008-5472.can-15-3537.