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#### **Rat Gut Hormone Multiplex Panel**

Our understanding of obesity has been transformed by the identification of several gut hormones, peptide hormones secreted from the gastrointestinal tract. While much less in known about the specific role of these gut hormones in terms of the cause or initiation of obesity, we do know that these peptides play significant roles in the regulation of gut motility and secretion, pancreatic islet hormone secretion and food intake and energy expenditure. In addition evidence of their presence and synthesis may be detectable in other organs of the body, including the brain where they may function as neuropeptides, taking part in both neurotransmission and neuromodulation.

Millipore is proud to introduce a Rat Gut Hormone multiplex assay that simultaneously measures the hormones GLP-1 (active), GIP (total), Ghrelin (active), PYY (total), PP, Amylin (active), Leptin, and Insulin. This panel provides the researcher with a useful tool for studying the biological functions of these hormones in the gut, as well as determining the physiological implications these peptide hormones may have throughout the body. All components included in each kit are sufficient to run 38 samples in duplicate in a 96-well plate and have been validated for study in serum, plasma, and cell/tissue culture samples.

#### Specifications

Assay Conditions	Quantity	Cat. No.
Overnight assay requiring	96-well	RGT-88K-02
25 μL of sample		

### User Friendly

- Kit includes all components to run assay
- Standards and quality controls included
- Convenient microtiter filter plate format
- Can be easily adapted for high throughput automation

#### **Exceptional Analytic Performance**

- Broad Standard Curve ranges
- Highly sensitive (<30 pg/mL)
- Highly accurate (84 93%)
- Excellent intra (<7%) and inter-assay (<24%) precision
- Insignificant cross-reactivity to other analytes within the panel

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#### **Performance Specifications**

#### **Standard Curve Range**

Ghrelin, PP, PYY: 6.9 – 5,000 pg/mL GIP: 2.7 – 2,000 pg/mL GLP-1, Amylin: 41.2 – 30,000 pg/mL Insulin, Leptin: 68.5 – 50,000 pg/mL

#### Sensitivity

Insulin: 28 pg/mL Amylin: 20 pg/mL Leptin: 27 pg/mL Ghrelin: 2 pg/mL GIP: 1 pg/mL GLP-1: 28 pg/mL PYY: 16 pg/mL PP: 17 pg/mL

#### Specificity

Each antibody pair in a panel is specific and displays insignificant cross-reactivity to other analytes within the panel.

#### Accuracy

Amylin: 92% Ghrelin: 90% GIP: 90% GLP-1: 84% Insulin: 93% Leptin: 87% PP: 88% PYY: 86%

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#### Precision

Intra-assay: < 7% Inter-assay: <24%

#### **Related Products**

Human Gut Hormone Panel Mouse Gut Hormone Panel