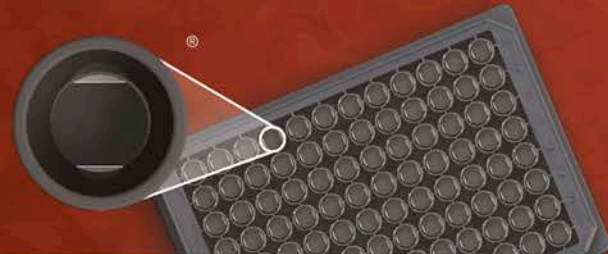


# MSD® Human Total PYY Kit

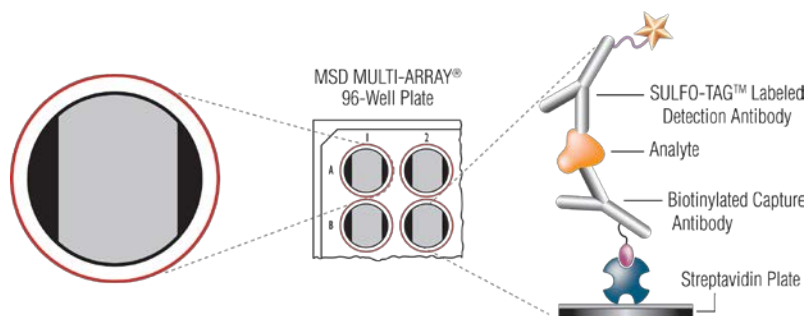
For quantitative determination in human serum and plasma



Alzheimer's Disease  
BioProcess  
Cardiac  
Cell Signaling  
Clinical Immunology  
Cytokines  
Hypoxia  
Immunogenicity  
Inflammation  
**Metabolic**  
Oncology  
Toxicology  
Vascular

## Catalog Numbers

Human Total PYY Kit	
Kit size	
1 plate	K151MPD-1
5 plates	K151MPD-2
25 plates	K151MPD-4



**Peptide-YY (PYY)** is a 36-amino acid peptide secreted from the intestinal L-cells of the gastrointestinal tract in proportion to the caloric content of a meal. Plasma PYY levels rise within 15 minutes after starting to eat and plateau within approximately 90 minutes, remaining elevated for up to 6 hours.<sup>1</sup> Two endogenous forms, PYY(1-36) and PYY(3-36), are released into circulation; PYY(3-36) is the major form (60%) of PYY in gut mucosal endocrine cells and in the bloodstream. This form results from the cleavage of PYY by the enzyme dipeptidyl peptidase-IV (DPP-IV); it acts on neuropeptide Y (NPY) receptors in the CNS to mediate satiety within the hypothalamic arcuate nucleus.<sup>2,3</sup> Exogenous administration of PYY(3-36) reduces energy intake and body weight in both humans and animals. Some studies have reported that obese individuals have lower basal fasting levels of PYY(3-36) and have a smaller rise in postprandial levels suggesting PYY may be a potential therapeutic target in obesity.<sup>1-3</sup>

The MSD Human Total PYY assay measures PYY (1-36) and PYY (3-36) and is available on STREPTAVIDIN GOLD™ plates. This datasheet outlines the performance of the assay.

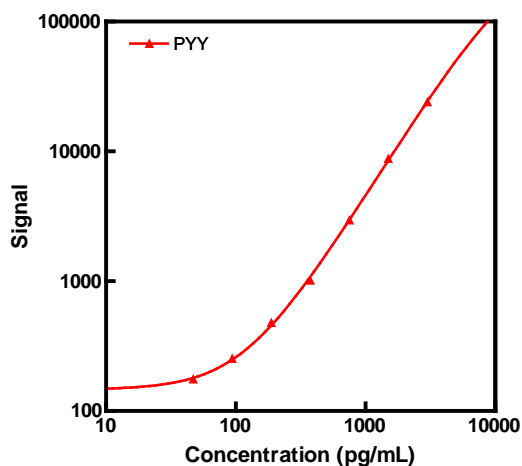
## Assay Sensitivity

	PYY
LLOD (pg/mL)	68

The lower limit of detection (LLOD) is a calculated concentration based on a signal 2.5 standard deviations above the background (zero calibrator blank).

## Typical Standard Curve

The following standard curve is an example of the wide dynamic range of the Human Total PYY assay.



Conc. (pg/mL)	PYY	
	Average Signal	%CV
0	138	8.2
47	176	6.3
94	254	3.1
188	480	3.5
375	1016	12.7
750	2958	3.5
1500	8810	4.9
3000	24 037	4.2

## Ordering information

MSD Customer Service  
Phone: 1-301-947-2085  
Fax: 1-301-990-2776  
Email: CustomerService@mesoscale.com

## Company Address

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[www.mesoscale.com](http://www.mesoscale.com)®

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Not for use in diagnostic  
procedures.

# MSD Metabolic Assays

## MSD Advantage

- **Multiplexing:** Multiple analytes can be measured in one well using typical sample volumes of 25  $\mu$ L or less without compromising speed or performance
- **Large dynamic range:** Linear range of up to five logs enables the measurement of native levels of biomarkers in normal and diseased samples without multiple dilutions
- **Minimal background:** The stimulation mechanism (electricity) is decoupled from the response (light signal), minimizing matrix interference
- **Simple protocols:** Only labels bound near the electrode surface are excited, enabling assays with fewer washes
- **Flexibility:** Labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- **High sensitivity and precision:** Multiple rounds of label excitation and emission enhance light levels and improve sensitivity

For a complete list of products, please visit our website at [www.mesoscale.com](http://www.mesoscale.com).

## References

1. Beglinger C, Degen L. Gastrointestinal satiety signals in humans--physiologic roles for GLP-1 and PYY? *Physiol Behav.* 2006 Nov 30;89(4):460-4.
2. Zac-Varghese S, et al. Translational studies on PYY as a novel target in obesity. *Curr Opin Pharmacol.* 2011 Dec;11(6):582-5.
3. De Silva A, Bloom SR. Gut Hormones and Appetite Control: A Focus on PYY and GLP-1 as Therapeutic Targets in Obesity. *Gut Liver.* 2012 Jan;6(1):10-20.

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