

# L-Glutamate Assay Kit II

## Accurate quantification

Easy to use kit accurately measures L-glutamate in samples. No special skill is required.

## Simple handling

Simple protocol compared to older assays utilizing L-glutamate decarboxylase or L-glutamate dehydrogenase.

## Low overhead cost

Room temperature assay reads on standard absorption spectrometer at 600 nm. Dose not require expensive specialized instrumentation.

### For the food manufacturing industry

1. Material control
2. Manufacturing control
3. Quality control



### For neuroscience and biology laboratories

- L-glutamate is a critical neurotransmitter.
- L- glutamate has key roles in cell metabolism and disease.

### L-Glutamate Assay Kit II Kit Components

1. **Assay buffer:** Good's buffer, pH 7.1 ..... 1 bottle (60 mL)
2. **L-glutamate oxidase:** (lyophilized powder) ..... 1 vial
3. **Standard solution:** L-glutamate solution (100mg/L) ..... 1 vial (1.5 mL)
4. **Assay protocol**

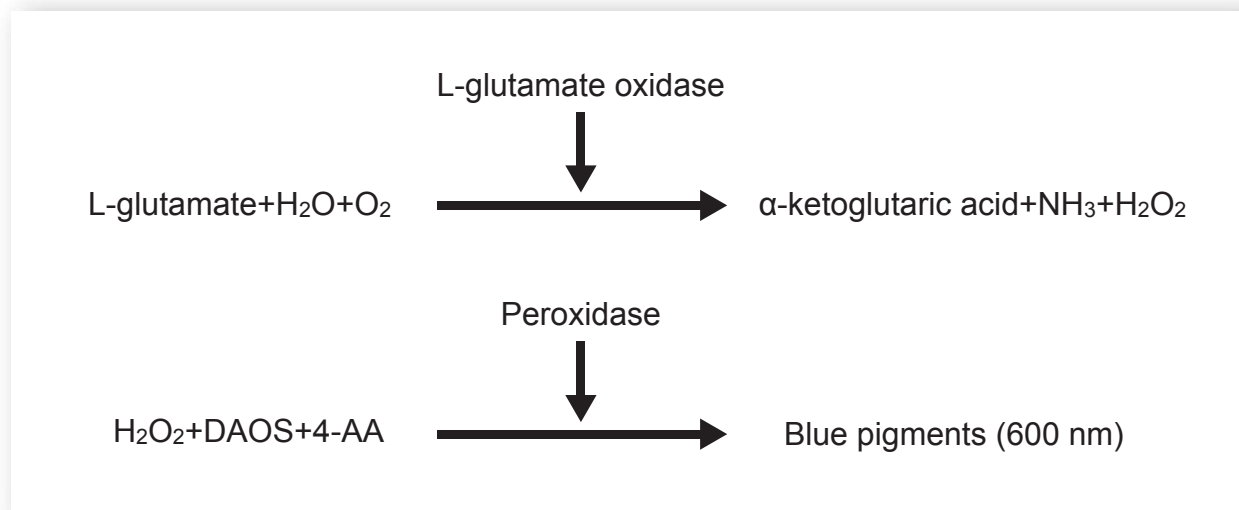
### References

1. Arima J. *et. al.*, *J Biochem* **134**, 805-812, 2003.
2. Yamaguchi H. *et. al.*, *Nihon Shoyu Kenkyujo Zasshi* (Japanese), **13**, 8-12, 1987.
3. Kusakabe H. *et. al.*, *Agric. Biol. Chem.*, **48**, 181-184, 1984.

Description	Cat. No.	Quantity	Storage
L-Glutamate Assay Kit II	YMS-80057	1 kit	4 °C

# L-Glutamate Assay Kit II

## Principle of L-Glutamate Assay Kit II



## L-Glutamate Oxidase 25

**High Quality and Great Value! L-Glutamate Oxidase 25 recombinant enzyme.**

*\*This product is not suitable for L-Glutamate Assay Kit II (Cat. No. YMS-80057).*

### Specifications

Molecular weight	140 kDa
Subunit structure	$\alpha_2\beta_2\gamma_2$ ( $\alpha$ : 43 kDa, $\beta$ : 17 kDa, $\gamma$ : 10 kDa)
Thermo stability	Stable below 60°C (30 min. at pH 6)
pH stability	pH 4 - 10 (60 min. at 50°C)
Optimum pH	pH 7 - 9
<i>K<sub>m</sub></i>	0.2 mM
Substrate specificity	L-Glu: 100% L-Gln, L-Asp, L-Glu and 16 other L-amino acids: 0%



### References

1. Arima J. et. al., *J Biochem* **134**, 805-812, 2003.

Description	Cat. No.	Quantity	Storage
L-Glutamate Oxidase 25	YMS-80049	25 unit	4 °C

For research use only. Not for diagnostic use.



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