Synaptic Systems

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# VGLUT 2

**Cat.No. 135 421; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)**

## Data Sheet

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|---|---|
| Reconstitution/ Storage | 100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl $H_2O$ to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. |
| Applications | **WB**: 1 : 1000 (AP staining) (see remarks)<br>**IP**: yes<br>**ICC**: 1 : 500<br>**IHC**: 1 : 200<br>**IHC-P/FFPE**: 1 : 500 |
| Clone | 95E11 |
| Subtype | IgG2a (κ light chain) |
| Immunogen | Synthetic peptide corresponding to AA 566 to 582 from rat VGLUT2 (UniProt Id: Q9JI12) |
| Epitop | Epitop: AA 566 to 582 from rat VGLUT2 (UniProt Id: Q9JI12) |
| Reactivity | Reacts with: rat (Q9JI12), mouse (Q8BLE7).<br>Other species not tested yet. |
| Specificity | Specific for VGLUT 2. |
| Remarks | **WB**: VGLUT 2 aggregates after boiling, making it necessary to run SDS-PAGE with non-boiled samples. |

**TO BE USED IN VITRO / FOR RESEARCH ONLY**
**NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

The **v**esicular **glu**tamate **t**ransporter **2 VGLUT 2**, also referred to as **DNPI** and **SLC17A6**, has a more restricted expression than the related VGLUT 1. Like VGLUT 1, it is both necessary and sufficient for uptake and storage of glutamate and thus comprises the sole determinant for a glutamatergic phenotype. Both VGLUTs are different from the plasma membrane transporters in that they are driven by a proton electrochemical gradient across the vesicle membrane.
VGLUT 1 and VGLUT 2 show complementary expression patterns. Together, they are currently the best markers for glutamatergic nerve terminals and glutamatergic synapses.

## Selected References SYSY Antibodies

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## Selected General References

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Fujiyama F, Furuta T, Kaneko T
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