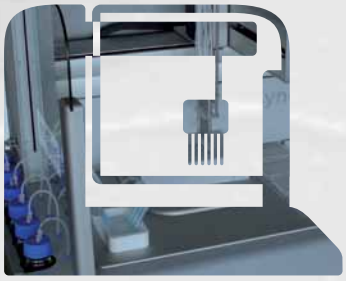
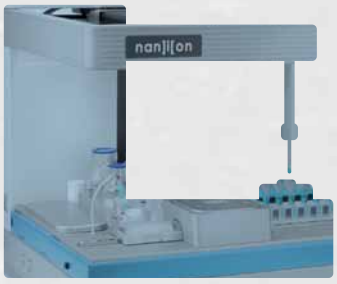
Nanion NPC-certified cells.
The optimum choice for your assays.

PrecisION™ hGABA$_A$ α5/β3/γ2-HEK

Cells from Merck Millipore, optimized for Nanion Patch Clamp Devices (NPC) Port-a-Patch, Patchliner and SyncroPatch96.





- Assay optimized for Nanion APCs
- Giga Ohm seals
- High success rates
- Stable current responses
- Cell line and assay support
- Optimized patch clamp solutions

NPC - certified cells

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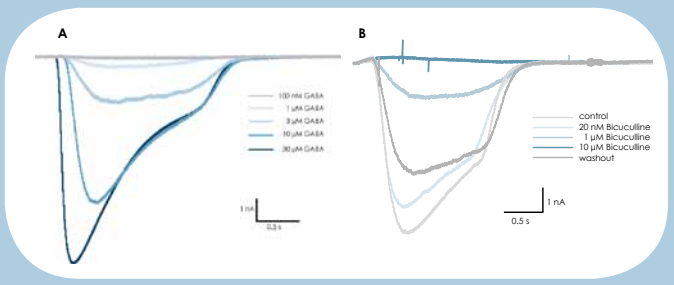
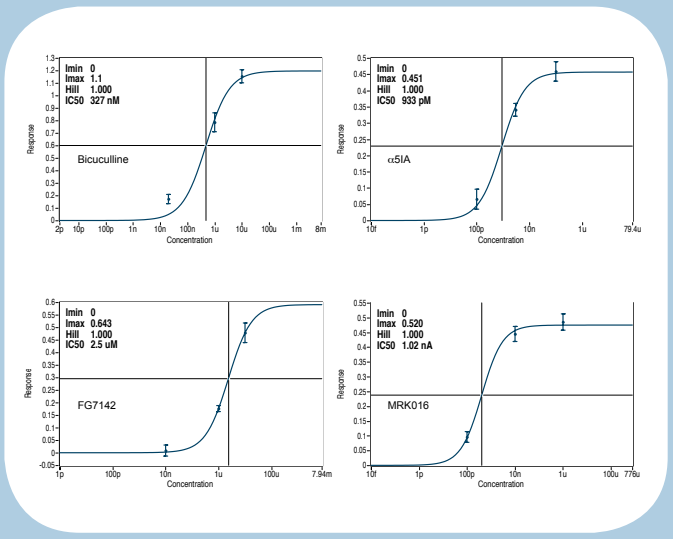
Nanion NPC-certified hGABA$_A$ α5/β3/γ2-HEK cells

The GABA receptor family is the most important class of inhibitory ion channels involved in synaptic transmission, and are selectively permeable to monovalent anions. They constitute an important therapeutic target for drugs affecting anxiety, sleep and muscle relaxation.



Raw data traces of GABA$_A$ α5β3γ2 expressing cells exposed to increasing GABA (A) or increasing Bicuculline concentrations, co-applied with the EC$_{20}$ GABA concentration, and a subsequent washout (B). Exposure time to the ligand was 2 s. Recordings were done on the SyncroPatch96.



Pharmacology on GABA$_A$ α5β3γ2 as recorded on the SyncroPatch96. Mean CRCs for Bicuculline, IC$_{50}$ = 327 nM (n = 14); for α5IA IC$_{50}$ = 933 pM (n = 11), maximum block was 45% at 100 nM; for FG7142 IC$_{50}$= 2.5 µM (n = 9), maximum block was 64.3% at 10 µM; for MRK016 maximum current inhibition was 52% at 1 µM, IC$_{50}$= 1.02 nM (n = 15).

hGABA$_A$ α5/β3/γ2-HEK from Merck Millipore

Passage stability:	> 15
Current amplitude / cell:	7.6 ± 0.7 nA (n=16)
IC$_{50}$s:	Bicuc., IC$_{50}$=327 nM (n=14); α5IA IC$_{50}$=933 pM (n=11); FG7142 IC$_{50}$=2.5 mM (n=9); MRK016 IC$_{50}$=1.0 nM (n=15)
Seal > 500 MOhm:	76 %
Seal > 1 GOhm:	53 %
C$_{Slow}$:	26.2 ± 2 pF (n=32)
R$_S$:	4.1 ± 0.2 (n=32)
Cell stability after harvesting:	~ 4 hrs
Average whole cell stability:	~ 70 min
Successful whole cell recordings:	70 - 90 %
Application directly from frozen stock:	yes

NPC-certified cells. The optimum choice.