


CTS™ Neurobasal™ and CTS™ Neurobasal™ -A Media

Catalog Numbers A1371001 and A1371201

Pub. No. MAN0004483 Rev. A.0

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](https://www.thermofisher.com/support).

Product description

CTS™ Neurobasal™ medium and CTS™ Neurobasal™ -A medium supplemented with B-27™ Supplement support cultivation of human glioblastoma, neurons, neural stem cells, and non-CNS lineage cell types with good viability and survival. Both media support the growth of neural and non-neural cells when supplemented with B-27™ Supplement, and contain anti-oxidants to reduce reactive oxygen damage and no glutamate and aspartate for study of excitatory neurotransmitters.

Contents and storage

Product	Catalog no.	Amount	Storage	Shelf Life ^[1]
CTS™ Neurobasal™ Medium	A13712-01	500 mL	2°C to 8°C	12 months
CTS™ Neurobasal™ -A Medium	A13710-01		Protect From Light	

^[1] Shelf Life duration is determined from Date of Manufacture.

Important information

- Use CTS™ Neurobasal™ Medium for pre-natal cultures
- Use CTS™ Neurobasal™ -A Medium for post-natal cultures

Prepare media

For glioblastoma or neural stem cells, CTS™ Neurobasal™ media must be supplemented with 0.5 mM to 2 mM L-glutamine or CTS™ GlutaMAX™ -I (Cat. No. A1286001), and a serum-free supplement or serum prior to use. The recommended supplement for human cells is B-27™ Supplement (Cat. No. 17504).

Plate cells

1. Coat autoclaved glass 12-mm diameter coverslips with 50 µg/mL poly-D-lysine in water (135 kD, Sigma) and incubate at room temperature overnight. The next day, aspirate the poly-D-lysine solution, rinse the coverslips once with water, and allow them to dry for one hour.
2. Plate human or hESC-derived cells at the desired concentration (i.e., 90–320 cells/mm²) on the poly-D-lysine coated coverslips in 60–150 µL Neurobasal™ -A/B-27™ Supplement (post-natal) or Neurobasal™ /B-27™ Supplement (pre-natal).
3. One hour after plating and incubating the cells (ambient oxygen with 5 % CO₂ is acceptable but 9% oxygen with 5% CO₂ is preferable), quickly pick up the coverslips, allow them to drain, and transfer the cells to 0.4 mL of CTS™ Neurobasal™ -A/B-27™ Supplement in a 24-well plate at 37°C. For post-natal neurons, aspirate the medium, rinse the coverslips once with warm CTS™ Neurobasal™ -A medium and refeed the cells with CTS™ Neurobasal™ -A medium supplemented with B-27™ Supplement, 0.5 mM L-glutamine, 1% penicillin-streptomycin (Cat. No. 15070) and 5 ng/mL FGF-basic CTS™ (Cat. No. CTP0261).
4. When culturing the cells for longer than 4 days, remove one-half of the medium on day 3 or 4 and replace it with an equal volume of medium containing 10 ng/mL FGF-basic (post-natal neurons). For pre-natal neurons, perform subsequent medium changes (day 4) using Neurobasal™ medium without glutamate to reduce glutamate toxicity in the culture. With

neuroblastomas, the glutamate should be included in the medium for both plating and subsequent media changes.

Related products

Product	Catalog no.
Dulbecco's Phosphate Buffered Saline CTS™ (DPBS) (1X), liquid, contains no calcium, magnesium, or phenol red	A12856
CELLStart™ CTS™	A10142
GlutaMAX™-I CTS™	A12860
TrypLE™ Select CTS™	A12859
FGF-basic Full Length CTS™ Recombinant Human	CTP0261
B-27™ Supplement, XenoFree CTS™	A14867
Penicillin-Streptomycin	15070

Limited product warranty

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For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

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