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# DATASHEET

aCSF Instant Powder (packets)

## Product overview

**Name** aCSF Instant Powder (packets)
**Cat No** HB9200
**Biological description** Artificial cerebrospinal fluid (aCSF) is a widely used buffer in electrophysiological experiments to sustain *ex-vivo* brain sections. This kit contains 20 instant powder packets. Simply add each packet to 1L of $dH_2O$, mix and bubble with carbogen to make 1L of aCSF at physiological pH.

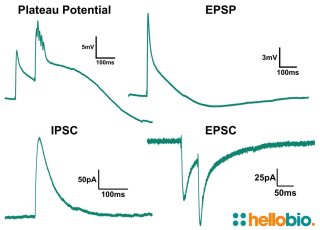
Key features:

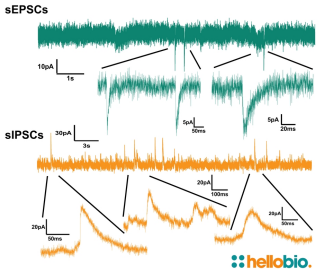
- Save time by using preformulated individual aCSF powder packets - each packet dissolves in seconds and there's no need to add $Mg^{2+}$ or $Ca^{2+}$
- More reproducible with each pack's highly accurate formulation - less error for better data.
- Extensively validated in a range of patch clamp electrophysiology experiments.

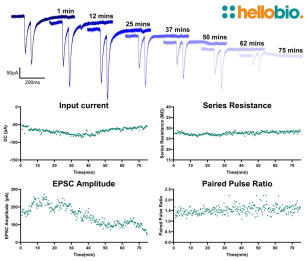
Contains (in mM): NaCl 124. Glucose 10, $NaHCO_3$ 24, KCl 3, $NaH_2PO_4$ 1.25, $CaCl_2$ 2.5, $MgCl_2$ 1.3

**Biological action** Buffer
**Description** Preformulated instant powder packets to make artificial cerebrospinal fluid (aCSF)

## Images





## Solubility & Handling

**Storage instructions** RT. Add each packet to 1L $dH_2O$.
**Handling** Add the contents of each packet to 1000ml of deionised water, mix well and bubble with carbogen (10-15 minutes) to make 1L of aCSF at physiological pH. Warm to 37°C before use.

Use immediately once opened.
**Important** This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

## Chemical Data

| | |
|---|---|
| **Kit contents** | Preformulated packets. Each makes 1L of aCSF. |
| **pH after carbogenation** | 7.2 |
| **pH before carbogenation** | 7.5 |

## References


**The development of synaptic plasticity induction rules and the requirement for postsynaptic spikes in rat hippocampal CA1 pyramidal neurones.**

Buchanan KA et al (2007) The Journal of physiology 585
**PubMedID** 17932146

**Reduced expression of the psychiatric risk gene DLG2 (PSD93) impairs hippocampal synaptic integration and plasticity.**

Griesius S et al (2022) Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology 47
**PubMedID** 35115661