

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 <i>ex-vivo</i> brain sections. This kit contains 20 instant powder packets. Simply dissolve the contents of each packet in dH ₂ O to a final volume of 1L, mix and bubble with carbogen to make 1L of aCSF at physiological pH.

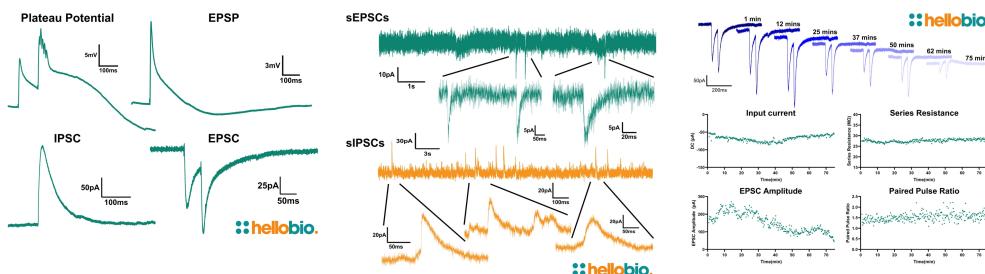
Key features:

- Save time by using preformulated individual aCSF powder packets - each packet dissolves in seconds and there's no need to add Mg²⁺ or Ca²⁺
- 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, NaHCO₃ 24, KCl 3, NaH₂PO₄ 1.25, CaCl₂ 2.5, MgCl₂ 1.3

Biological action	Buffer
Customer comments	<i>Amazing. We were having issues getting consistency with our 2-photon slice imaging and ultimately it must have been the osmolarity of our previous aCSF that we were making because the minute we switched to Hello Bio, our results just got better. Honestly, so so worth it!! And really easy and straightforward. I love this product. Verified customer, MIT</i>
Description	Preformulated instant powder packets to make artificial cerebrospinal fluid (aCSF)

Images





Solubility & Handling

Storage instructions	RT. Add each packet to 1L dH ₂ O.
Handling	Dissolve the contents of each packet in dH ₂ O to a final volume of 1000ml, 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](#)