

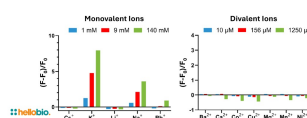
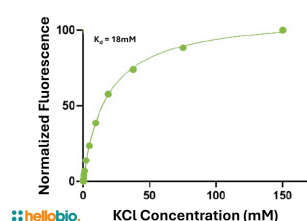
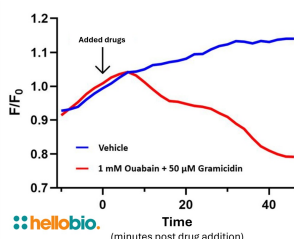
DATASHEET

IPG-2 AM

Product overview

Name	IPG-2 AM
Cat No	HB18045
Alternative names	Asante Potassium Green, Ion Potassium Green, APG, IPG, APG-2, IPG-2
Biological description	Yellow-green fluorescent potassium indicator ($K_d = 18\text{mM}$) which can be used with common filter sets (e.g. YFP and FITC) and multiphoton approaches (Excitation 525nm, Emission 545nm). Suitable for diverse applications such as extracellular K^+ sensing and monitoring intracellular K^+ dynamics. Synthetic fluorochrome which incorporates a K^+ -binding moiety. Under conditions where K^+ is not bound, the fluorescence of the sensor is significantly quenched. When K^+ is bound, the quenching is relieved, and the fluorescence of the sensor dramatically increases. Compatible with a wide variety of detectors including fluorescent microscopes, plate readers, flow cytometers, and fluorescent indicator-doped solid-state sensors.
Applications	fluorescence imaging, live cell imaging
Purity	>90%
Description	Yellow-green fluorescent membrane permeable potassium indicator

Images



Biological Data

Application notes	Please follow our IPG-2 AM Protocol
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Solubility & Handling

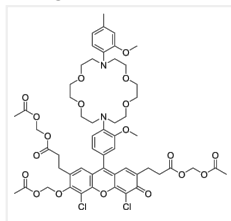
Storage instructions	-20°
Solubility overview	DMSO
Handling	This compound is light sensitive; exposure to light may affect compound performance. We therefore recommend storing the solid material and any solutions in the dark and protecting from light.
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name	6-[(acetyloxy)methoxy]-4,5-dichloro-9-[3-methoxy-4-[16-(2-methoxy-4-methylphenyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadec-7-yl]phenyl]-3-oxo-3H-xanthene-2,7-dipropanoic acid, 2,7-bis[(acetyloxy)methyl] ester
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Molecular Weight
Chemical structure

1128



Molecular Formula
CAS Number
PubChem identifier
SMILES

C₅₅H₆₄Cl₂N₂O₁₉

1369302-24-8

163342040

O=C(C)OCOC(CCC1=CC2=C(C3=CC(OC)=C(N4CCOCCOCCN(CCOCCOCC4)C5=C(OC)C=C(C)C=C5)C=C3)C6=CC(CCC(OCOC(C)=O)=O)=C(OCOC(C)=O)C(Cl)=C6OC2=C(C1=O)Cl)=O

InChIKey
Appearance
Excitation
Emission

FLNBWSAACUIXPZ-UHFFFAOYSA-N

Solid

525 nm

545 nm

References

Characterization of Procoagulant COAT Platelets in Patients with Glanzmann Thrombasthenia.

Aliotta A et al (2020) International journal of molecular sciences 21

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[33327658](#)

Inflammasome Activation and IL-1 β Release Triggered by Nanosecond Pulsed Electric Fields in Murine Innate Immune Cells and Skin.

Mazzarda F et al (2024) Journal of immunology (Baltimore, Md. : 1950) 212

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[38047899](#)

Modulation of neuronal activity in cortical organoids with bioelectronic delivery of ions and neurotransmitters.

Park Y et al (2024) Cell reports methods 4

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[38218190](#)
