

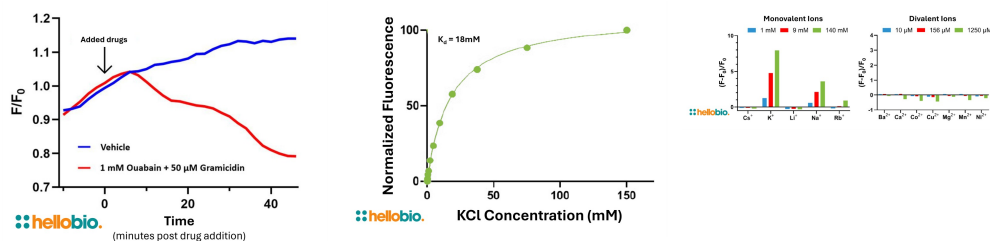
# DATASHEET

## IPG-2 AM

### Product overview

<b>Name</b>	IPG-2 AM
<b>Cat No</b>	HB18045
<b>Alternative names</b>	Asante Potassium Green, Ion Potassium Green, APG, IPG, APG-2, IPG-2
<b>Biological description</b>	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. For optimal cell loading, F-127 is available either as a <b>10% solution in water (HB16503)</b> and <b>20% solution in DMSO (HB9631)</b> .
<b>Applications</b>	fluorescence imaging, live cell imaging
<b>Purity</b>	>90%
<b>Description</b>	Yellow-green fluorescent membrane permeable potassium indicator

### Images



### Biological Data

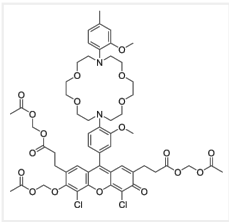
<b>Application notes</b>	Please follow our <a href="#">IPG-2 AM Protocol</a>
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### Solubility & Handling

<b>Storage instructions</b>	-20°
<b>Solubility overview</b>	DMSO

<b>Handling</b>	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.
<b>Important</b>	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
Molecular Weight	1128
Chemical structure	
Molecular Formula	C <sub>55</sub> H <sub>64</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>19</sub>
CAS Number	1369302-24-8
PubChem identifier	163342040
SMILES	<chem>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</chem>
InChiKey	FLNBWSAACUIXPZ-UHFFFAOYSA-N
Appearance	Solid
Excitation	525 nm
Emission	545 nm

## References

### Characterization of Procoagulant COAT Platelets in Patients with Glanzmann Thrombasthenia.

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

**PubMedID** [33327658](#)

### Inflammasome Activation and IL-1 $\beta$ 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

**PubMedID** [38047899](#)

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

Park Y et al (2024) Cell reports methods 4

**PubMedID** [38218190](#)