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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 to the second second

Yellow-green fluorescent potassium indicator ($K_d = 18 mM$) 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 10% solution in water

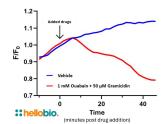
(HB16503) and 20% solution in DMSO (HB9631).

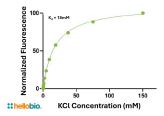
Applications fluorescence imaging, live cell imaging

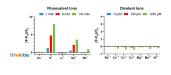
Purity >90%

Description Yellow-green fluorescent membrane permeable potassium indicator

Images







Biological Data

Application notes Please follow our IPG-2 AM Protocol

Solubility & Handling

Storage instructions -20°
Solubility overview DMSO

Storage of solutions Pre

Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

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.

Stable for ambient temperature shipping. Follow storage instructions on receipt.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

Shipping Conditions

Important

Chemical name 6-[(acetyloxy)methoxy]-4,5-dichloro-9-[3-methoxy-4-[16-(2-methoxy-4-methylphenyl)-1,4,10,13-tetraox

a-7,16-diazacyclooctadec-7-yl]phenyl]-3-oxo-3H-xanthene-2,7-dipropanoic acid,

2,7-bis[(acetyloxy)methyl] ester

Molecular Weight Chemical structure 1128

 $\qquad \qquad \mathsf{SMILES} \qquad \qquad \mathsf{O=C(C)OCOC(CCC1=CC2=C(C3=CC(OC)=C(N4CCOCCOCCN(CCOCCOCC4)C5=C(OC)C=C(C)) }$

C = C5)C = C3)C6 = CC(CCC(OCOC(C) = O) = C(OCOC(C) = O)C(CI) = C6OC2 = C(C1 = O)CI) = OCOC(CI) = C6OC2 = C(C1 = O)CI) = OCOC(CI) =

InChiKey FLNBWSAACUIXPZ-UHFFFAOYSA-N

AppearanceSolidExcitation525 nmEmission545 nm

References

Characterization of Procoagulant COAT Platelets in Patients with Glanzmann Thrombasthenia.

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

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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