

PRODUCT CATALOG














We are committed to providing pure, high quality indicators to empower better research results in life science, neuroscience, and drug discovery. These products can be found in our online store, along with full documentation. Please feel free to email us at sales@ionindicators.com for questions or further information.

CALCIUM INDICATORS

The study of the function of Ca²⁺ ions inside cells is one of the most dynamic areas of modern cell biology. Ca²⁺ is known to control neurotransmission, secretion of hormones, muscle contraction, and a myriad of physiological functions. It is suspected to be involved in cell division, movements of non-muscle cells, as well as memory and learned patterns of the nervous system. In all cases, localized fluctuations in cytosolic free Ca²⁺ levels inside cells are believed to control these functions. Techniques for the measurement and manipulation of Ca²⁺ are therefore crucial and have been advancing rapidly largely as a result of invention of fluorescent ion indicators.

We list our fluorescent calcium indicators by grouping them according to the color of the light they emit on binding calcium, namely Red, Green, and Near UV. [Learn More >](#)

Item Name (*Special Order)	Product Number	Quantity	Price	MW (g/mol)	Excitation (nm)	Emission (nm)	K _d (mM)	Solubility	Info + Ordering
Fluo-2 AM HA	1021B	1mg	\$125	1061	490	516	230	DMSO	
	1021E	20x50µg	\$175						
Fluo-2 HA K ⁺ salt	1022B	1mg	\$130	891	490	516	230	H ₂ O	
	1022E	20x50µg	\$180						
Fluo-3 AM	1031B	1mg	\$150	1129	506	525	390	DMSO	
	1031E	20x50µg	\$200						
Fluo-3 K ⁺ Salt	1032B	1mg	\$145	959	506	525	390	H ₂ O	
	1032E	20x50µg	\$195						
Fluo-4 AM	1041C	500µg	\$145	1096	488	516	335	DMSO	
	1041F	10x50µg	\$195						
Fluo-4 K ⁺ Salt	1042C	500µg	\$145	926	490	516	335	H ₂ O	
	1042F	10x50µg	\$195						
Fura-2 AM	1051B	1mg	\$95	1002	371	471	145	DMSO	
	1051E	20x50µg	\$145						
Fura-2 K ⁺ Salt	1052B	1mg	\$95	832	363	505	145	H ₂ O	
	1052E	20x50µg	\$145						
Fura-2 LeakRes AM	1061B	1mg	\$225	1132	369	471	145	DMSO	
	1061E	20x50µg	\$275						
Fura-2 Leak Res K ⁺ Salt	1062B	1mg	\$225	928	363	505	145	H ₂ O	
	1062E	20x50µg	\$275						

Calcein AM	1071B	1mg	\$135	995	N/A	N/A	4	DMSO	
	1071E	20x50µg	\$185						
BAPTA AM*	1081T	25mg	\$95	488	N/A	N/A	107	DMSO	
	1081U	25x1mg	\$145						


SODIUM INDICATORS

There is a large difference in the sodium ion (Na⁺) concentration inside and outside the cell (5-40 mM intracellular versus 120-450 mM extracellular, depending on organism). This concentration gradient is used to power nutrient uptake, to regulate concentrations of other intracellular ions and solutes, and to generate and transmit electrical impulses in excitable cells such as nerve and muscle. These functions are so important that organisms devote a major part of their metabolic energy to maintaining the sodium gradient. The low intracellular Na⁺ concentration requires that a Na⁺ indicator have the sensitivity to measure any small changes that occur. Moreover, intracellular potassium ion (K⁺) concentration is typically high (in excess of 100 mM) so a Na⁺ indicator should respond selectively to Na⁺, not K⁺. [Learn More >](#)

Item Name (*Special Order)	Product Number	Quantity	Price	MW (g/mol)	Excitation (nm)	Emission (nm)	K _d (mM)	Solubility	Info + Ordering
ION NaTRIUM Green-2 AM	2011C	500µg	\$340	1084	525	545	20	DMSO	
	2011F	10x50µg	\$390						
ION NaTRIUM Green-2 TMA ⁺ Salt	2013C	500µg	\$340	1087	525	545	20	H ₂ O	
	2013F	10x50µg	\$390						
SBFI AM	2021B	1mg	\$375	1127	335 - 348	510	4	DMSO	
	2021E	20x50µg	\$425						
SBFI K ⁺ Salt	2022B	1mg	\$355	991	345	544	4	H ₂ O	
	2022E	20x50µg	\$405						







pH INDICATORS

Knowledge of cytosolic pH (pHi) is essential in many cellular studies. Intracellular pH is generally between ~6.8 and 7.4 in the cytosol and ~4.5 and 6.0 in the cell's acidic organelles. Unlike intracellular free Ca²⁺ concentrations, which can rapidly change, pH inside a cell varies by only fractions of a unit, and such changes can occur quite slowly. Intracellular pH can be estimated by measuring the ratio of the fluorescence intensities. Our indicators can detect physiological changes of no more than a few tenths of a pH unit. [Learn More >](#)

Item Name (*Special Order)	Product Number	Quantity	Price	MW (g/mol)	Excitation (nm)	Emission (nm)	pKa	Solubility	Info + Ordering
BCECF AM*	4011B	1mg	\$98	821	500/450 hi/lo pH	531	7	DMSO	
	4011E	20x50µg	\$148						

POTASSIUM INDICATORS

Importance of the potassium ion (K⁺) is coupled to the sodium ion (Na⁺), because the cell expends a major part of its metabolic energy maintaining the concentrations of Na⁺ and K⁺ within the cell. Intracellular concentration ranges are 10-40 mM for Na⁺ and 120-400 mM for K⁺. Extracellular concentration ranges are 4-40 mM for K⁺ and 120-400 mM for Na⁺. [Learn More >](#)

Item Name (*Special Order)	Product Number	Quantity	Price	MW (g/mol)	Excitation (nm)	Emission (nm)	K _d (mM)	Solubility	Info + Ordering
ION Potassium Green-2 AM	3011C	500µg	\$275	1128	526	546	18	DMSO	
	3011F	10x50µg	\$325						
ION Potassium Green-2 TMA⁺ Salt	3013C	500µg	\$255	1131	526	546	18	H ₂ O	
	3013F	10x50µg	\$305						
ION Potassium Green-4 AM	3021C	500µg	\$230	1071	526	546	20	DMSO	
	3021F	10x50µg	\$280						
ION Potassium Green-4 TMA⁺ Salt	3023C	500µg	\$230	1291	526	546	7	H ₂ O	
	3023F	10x50µg	\$280						
PBFI AM	3031B	1mg	\$350	1171	349	550	5	DMSO	
	3031E	20x50µg	\$400						
PBFI TMA⁺ Salt	3033B	1mg	\$330	1175	338	490	5	H ₂ O	
	3033E	20x50µg	\$380						

SPECIAL ORDERS

We are happy to answer your questions about special order products. Please contact our head of sales, [Mark Huggans](#) with your request.



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