

VAN GUARD

1400 SERIES Fluorescence Microscopy Filter Sets

Features

- Designed For Overall Optimization Of Signal-To-Noise, Brightness, & Multi-Color Discrimination
- Excitation & Emission Bands Optimized For Color Perception
- Hundreds Of Fluorophores Supported
- Custom Options Available

VAN GUARD[®]
INFINITE • SOLUTIONS





1400-Series Fluorescence Microscopy Filter Sets

VanGuard Fluorescence Microscopy Filter Sets are optimized to maximize emission collection and minimize optical degradation by using specialized optical polishing and anti-reflective coatings.

The exciters are high-performance bandpass filters with reflective metal layers tolerant to intense excitation sources, the dichroics are hard-surface coated, and the emitters feature anti-reflection coating to minimize back reflection and enhance transmission typically to 90%.

The following table lists fluorophores and the recommended filter set for single dye applications. Please contact us for quotations on multiple-dye applications.

Fluorophore	EX	EM	VanGuard Filter Set
AcGFP 1	475	505	1400-FFXF100-2
Acridine Yellow	470	550	1400-FFXF023
Acridine Orange (+DNA)	500	526	1400-FFXF104-2
Acridine Orange (+RNA)	460	650	1400-FFQMAX-BLUE
Alexa Fluor® 350	347	442	1400-FFQMAX-BLUE
Alexa Fluor® 405	401	421	1400-FFXF11
Alexa Fluor® 430	434	540	1400-FFXF14-2
Alexa Fluor® 488	495	519	1400-FFXF100-2
Alexa Fluor® 500	503	525	1400-FFXF104-2
Alexa Fluor® 532	531	554	1400-FFXF104-2
Alexa Fluor® 546	556	573	1400-FFXF108-2
Alexa Fluor® 555	553	568	1400-FFXF108-2
Alexa Fluor® 568	579	604	1400-FFXF102-2
Alexa Fluor® 594	591	618	1400-FFXF102-2
Alexa Fluor® 610	612	628	1400-FFXF102-2
Alexa Fluor® 633	632	647	1400-FFXF140-2
Alexa Fluor® 647	653	669	1400-FFXF110-2
Alexa Fluor® 660	663	690	1400-FFXF141-2
Alexa Fluor® 680	679	702	1400-FFXF141-2
Alexa Fluor® 700	702	723	1400-FFXF142-2
Alexa Fluor® 750	749	775	1400-FFXF143-2
Alexa Fluor® 488/546 FRET	495	573	1400-FFXF164
Alexa Fluor® 488/555 FRET	495	568	1400-FFXF164
Alexa Fluor® 488/Cy3® FRET	495	570	1400-FFXF165
Allophycocyanin (APC)	650	660	1400-FFXF110-2
AMCA/AMCA-X	345	445	1400-FFXF006
AmCyan1	458	489	1400-FFXF168
7-Aminoactinomycin D (7-AAD)	546	647	1400-FFXF103-2
7-Amino-4-methylcoumarin	351	430	1400-FFXF006
Aniline Blue	370	509	1400-FFXF009
ANS	372	455	1400-FFXF005-2
AsRed2	578	592	1400-FFQMAX-YELLOW
ATTO-TAG™ CGQCA	465	560	1400-FFXF018-2
ATTO-TAG™ FQ	486	591	1400-FFXF115-2
Auramine O-Feulgen	460	550	1400-FFXF020
Azami Green	493	505	1400-FFQMAX-GREEN
BCECF	503	528	1400-FFXF016
BFP (Blue Fluorescent Protein)	382	448	1400-FFQMAX-BLUE
BFP/DsRed2 FRET	382	583	1400-FFXF159
BFP/eGFP FRET	382	508	1400-FFXF089-2
BFP/YFP FRET	382	527	1400-FFXF158
BOBO™-1, BO-PRO™-1	462	481	1400-FFXF114-2
BOBO™-3, BO-PRO™-3	570	604	1400-FFXF102-2
BODIPY® FL	505	513	1400-FFXF100-2
BODIPY® TMR	542	574	1400-FFXF108-2
BODIPY® TR-X	589	617	1400-FFXF102-2
BODIPY® 492/515	490	515	1400-FFXF100-2
BODIPY® 493/503	500	506	1400-FFQMAX-GREEN
BODIPY® 500/510	509	515	1400-FFXF104-2
BODIPY® 505/515	502	510	1400-FFQMAX-GREEN
BODIPY® 530/550	533	550	1400-FFXF108-2
BODIPY® 558/568	558	568	1400-FFXF108-2
BODIPY® 564/570	564	570	1400-FFXF108-2
BODIPY® 581/591	582	590	1400-FFXF102-2
BODIPY® 630/650-X	630	650	1400-FFXF045
BODIPY® 650/665-X	650	665	1400-FFXF110-2
BODIPY® 665/676	665	676	1400-FFXF110-2
BTC	401/464	529	1400-FFXF133

Fluorophore	EX	EM	VanGuard Filter Set
Calcein	494	517	1400-FFXF100-2
Calcein Blue	375	420	1400-FFXF006
Calcium Crimson™	590	615	1400-FFXF102-2
Calcium Green-1™	506	531	1400-FFXF104-2
Calcium Orange™	549	576	1400-FFXF108-2
CalcoFluor® White	350	440	1400-FFXF006
5-Carboxyfluorescein (5-FAM)	492	518	1400-FFXF100-2
5-Carboxynaphthofluorescein	598	668	1400-FFXF102-2
6-Carboxyrhodamine 6G	525	555	1400-FFXF104-2
5-Carboxytetramethylrhodamine (5-TAMRA)	542	568	1400-FFXF108-2
Carboxy-X-rhodamine (5-ROX)	574	602	1400-FFXF102-2
Cascade Blue®	400	420	1400-FFXF006
Cascade Yellow™	402	545	1400-FFXF106
CF2 (GeneBLAzer™)	402	520	1400-FFXF106
Cell Tracker Blue	353	466	1400-FFXF006
Cerulean	433	475	1400-FFXF114-2
CFP (Cyan Fluorescent Protein)	434	477	1400-FFXF114-2
CFP/DsRed2 FRET	434	583	1400-FFXF152
CFP/YFP FRET	434	527	1400-FFXF088
Chromomycin A3	450	470	1400-FFXF114-2
Cl-NERF (low pH)	504	540	1400-FFXF104-2
CoralHue Azami Green	492	505	1400-FFXF171
CoralHue Dronpa Green	503	518	CALL
CoralHue Kaede Green	508	518	1400-FFXF153
CoralHue Kaede Red	572	580	1400-FFXF153
CoralHue Keima Red	440	620	CALL
CoralHue Kusabira Orange (mKO)	552	559	1400-FFXF108-2
CoralHue Midorishi-Cyan (MiCy)	472	492	1400-FFXF116-2
CPM	385	471	1400-FFXF011
6-CR 6G	518	543	1400-FFXF104-2
CryptoLight CF-2	584/642	657	1400-FFXF044
CryptoLight CF-5	566	597	1400-FFXF039
CryptoLight CF-6	566	615	1400-FFXF042
CTC Formazan	450	630	1400-FFXF021
Cy2®	489	506	1400-FFXF100-2
Cy3®	550	570	1400-FFXF108-2
Cy3.5®	581	596	1400-FFXF102-2
Cy5®	649	670	1400-FFQMAX-FAR-RED
Cy5.5®	675	694	1400-FFXF141-2
Cy7®	743	767	1400-FFXF143-2
Cy3®/Cy5.5® FRET	550	694	1400-FFXF167
Cy Pet	435	477	1400-FFXF114-2
Cycle 3 GFP	395/478	507	1400-FFXF076
Dansylcadaverine	335	518	1400-FFXF002-2
Dansylchloride	380	475	1400-FFXF10-2
DAPI	358	461	1400-FFQMAX-BLUE
Dapoxyl®	373	574	1400-FFXF005-2
DiA (4-Di-16-ASP)	491	613	1400-FFXF021
DiD (DiIC18(5))	644	665	1400-FFQMAX-FAR-RED
DIDS	341	414	1400-FFXF003
DiI (DiIC18(3))	549	565	1400-FFXF108-2
DiO (DiOC18(3))	484	501	1400-FFXF100-2
DiR (DiIC18(7))	750	779	1400-FFXF143-2
Di-4 ANEPPS	488	605	1400-FFXF021
Di-8 ANEPPS	468	635	1400-FFXF021
DM-NERF (4.5-6.5 pH)	510	536	1400-FFXF104-2
DsRed2 (Red Fluorescent Protein)	558	583	1400-FFQMAX-FITC-TRITC
DsRed-Express	557	579	1400-FFXF108-2
DsRed Monomer	556	586	1400-FFXF108-2
ELF® -97 Alcohol	345	530	1400-FFXF009
Emerald	487	509	1400-FFXF172
EmGFP	487	509	1400-FFXF100-2
Eosin	524	544	1400-FFXF104-2
Eythrosin	529	554	1400-FFXF104-2
Ethidium Bromide	518	605	1400-FFXF103-2
Ethidium Homodimer-1 (EthD-1)	528	617	1400-FFXF103-2
Europium (III) Chloride	337	613	1400-FFXF002-2
5-FAM (5-Carboxyfluorescein)	492	518	1400-FFXF100-2
Fast Blue	365	420	1400-FFXF006
Fluorescein (FITC)	494	518	1400-FFXF100-2
FITC/Cy3® FRET	494	570	1400-FFXF162
FITC/Rhod 2 FRET	494	571	1400-FFXF162
FITC/TRITC FRET	494	580	1400-FFXF163
Fluo-3	506	526	1400-FFXF104-2
Fluo-4	494	516	1400-FFXF100-2
FluoX®	494	519	1400-FFXF100-2
Fluoro-Gold™ (High pH)	368	565	1400-FFXF009
Fluoro-Gold™ (Low pH)	323	408	1400-FFXF005-2
Fluoro Jade	475	525	1400-FFXF100-2
FM® 1-43	479	598	1400-FFXF115-2

Fluorophore	EX	EM	VanGuard Filter Set	Fluorophore	EX	EM	VanGuard Filter Set
Fura-2	335	505	1400-FFXF004-2	POPO™-1, PO-PRO™-1	434	456	1400-FFXF114-2
Fura-2/BCECF	335/503	505/528	1400-FFXF079-2	POPO™-3, PO-PRO™-3	534	572	1400-FFXF108-2
Fura Red™	436	637	1400-FFXF017	Propidium Iodide	536	617	1400-FFXF103-2
Fura Red™/Fluo-3	472/506	672/527	1400-FFXF026	PyMPO	415	570	1400-FFXF015
GeneBLAzer™ (CCF2)	402	520	1400-FFXF124	Pyrene	345	378	1400-FFXF002-2
GFP wt	395/475	509	1400-FFXF169	Pyronin Y	555	580	1400-FFXF108-2
eGFP	488	508	1490-FFXF100-2	Qdot™ 525 Conjugate	UV	525	1400-FFXF301-1
GFP (Sapphire)	395	508	1400-FFXF076	Qdot™ 565 Conjugate	UV	565	1400-FFXF302-1
eGFP/DsRed FRET	470	585	1400-FFXF151-2	Qdot™ 585 Conjugate	UV	585	1400-FFXF303-1
eGFP/Rhod-2 FRET	488	571	1400-FFXF151-2	Qdot™ 605 Conjugate	UV	605	1400-FFXF304-1
HcRed	591	613	1400-FFXF102-2	Qdot™ 625 Conjugate	UV	625	1400-FFXF309-1
HiLyte Fluor™ 488	497	525	1400-FFXF102-2	Qdot™ 655 Conjugate	UV	655	1400-FFXF305-1
HiLyte Fluor™ 555	550	566	1400-FFXF108-2	Qdot™ 705 Conjugate	UV	705	1400-FFXF306-1
HiLyte Fluor™ 647	649	672	1400-FFXF140-2	Qdot™ 800 Conjugate	UV	800	1400-FFXF307-1
HiLyte Fluor™ 680	688	700	1400-FFXF141-2	Quinacrine Mustard	423	503	1400-FFXF014-2
HiLyte Fluor™ 750	750	782	1400-FFXF143-2	Resorufin	570	585	1400-FFXF102-2
Hoechst 33342 & 33258	352	461	1400-FFQMAX-BLUE	Red Fluorescent Protein (DsRed2)	561	585	1400-FFXF108-2
7-Hydroxy-4-Methylcoumarin (pH9)	360	449	1400-FFXF006	RH 414	500	635	1400-FFXF103-2
1,5 IAEDANS	336	482	1400-FFXF002-2	Rhod-2	550	571	1400-FFXF108-2
Indo-1	330	401	1400-FFXF007	Rhodamine B	555	580	1400-FFXF108-2
JC-1	498/593	525/595	1400-FFXF115-2	Rhodamine Green™	502	527	1400-FFXF104-2
G-JOE	525	555	1400-FFXF104-2	Rhodamine Red™	570	590	1400-FFXF102-2
JOJO™-1, JO-PRO™-1	529	545	1400-FFXF104-2	Rhodamine Phalloidin	542	565	1400-FFXF108-2
JRed	584	610	1400-FFQMAX-RED	Rhodamine 110	496	520	1400-FFXF100-2
Keima Red	440	620	1400-FFXF177	Rhodamine 123	507	529	1400-FFXF104-2
Kusabira Orange	548	559	1400-FFQMAX-YELLOW	5-ROX (Carboxy-X-Rhodamine)	574	602	1400-FFXF102-2
Lissamine Rhodamine B	570	590	1400-FFXF102-2	SBF1	334	525	1400-FFXF004-2
LOLO™-1, LO-PRO™-1	565	579	1400-FFXF039	Sensilight P-1	550	664	1400-FFXF036
Lucifer Yellow	428	536	1400-FFXF014-2	Sensilight P-3	609	661	1400-FFXF045
LysoSensor™ Blue (pH 5)	374	424	1400-FFXF131	SITS	337	436	1400-FFXF003
LysoSensor™ Green (pH5)	442	505	1400-FFXF100-2	SNAFL®-1	576	635	1400-FFXF029
LysoSensor™ Yellow/Blue (pH 4.2)	384	540	1400-FFXF129-2	SNAFL®-2	525	546	1400-FFXF029
LysoTracker™ Green	504	511	1400-FFXF104-2	SNARF®-1	575	635	1400-FFXF072
LysoTracker™ Red	577	592	1400-FFXFQMAX-RED	Sodium Green	507	535	1400-FFXF104-2
LysoTracker™ Yellow	465	535	1400-FFXF018-2	Spectrum Aqua®	433	480	1400-FFXF201
Mag-Fura-2	330	491	1400-FFXF004-2	Spectrum Blue®	400	450	1400-FFXF006
Mag-Indo-1	330	417	1400-FFXF007	Spectrum Gold®	530	555	1400-FFXF203
Magnesium Green™	506	531	1400-FFXF104-2	Spectrum Green®	497	524	1400-FFXF202
Marina Blue®	365	460	1400-FFXF006	Spectrum Orange®	559	588	1400-FFXF204
mBanana	540	553	CALL	Spectrum Red®	587	612	1400-FFXF207
mCherry	587	610	1400-FFQMAX-RED	SpectrumFRed®	655	675	1400-FFXF208
mCitrine	516	529	1400-FFXF104-2	SYTO® 11	508	527	1400-FFXF104-2
4-Methylumbelliferone	360	449	1400-FFXF006	SYTO® 13	488	509	1400-FFXF100-2
mHoneydew	487	537	CALL	SYTO® 17	521	634	1400-FFXF044
Midorishii Cyan	472	495	1400-FFXF116-2	SYTO® 45	452	484	1400-FFXF114-2
Mithramycin	395	535	1400-FFXF014-2	SYTO® Blue	445	470	1400-FFXF114-2
Mitofluor Far Red	680	650-773	1400-FFXF142-2	SYTO® Green	504	523	1400-FFXF104-2
Mitofluor Green	490	516	1400-FFXF100-2	SYTO® Orange	547	570	1400-FFXF108-2
Mitofluor Red 589	588	622	1400-FFXF102-2	5-TAMRA (5-Carboxytetramethylrhodamine)	542	568	1400-FFXF108-2
Mitofluor Red 594	598	630	1400-FFXF102-2	tdTomato	554	581	1400-FFXF173
MitoTracker™ Green	490	516	1400-FFXF100-2	Tetramethylrhodamine (TRITC)	555	580	1400-FFXF108-2
MitoTracker™ Orange	551	576	1400-FFXF108-2	Texas Red®/Texas Red®-X	595	615	1400-FFXF102-2
MitoTracker™ Red	578	599	1400-FFXF102-2	Thiadicarbocyanine	651	671	1400-FFXF047
MitoTracker™ Deep Red	644	655	1400-FFXF110-2	Thiazine Red R	510	580	1400-FFXF028
mOrange	548	562	1400-FFXF108-2	Thiazole Orange	453	480	1400-FFXF114-2
mPlum	590	649	1400-FFXF110-2	Topaz	514	527	1400-FFXF104-2
mRaspberry	598	625	1400-FFXF102-2	T-Sapphire	399	511	1400-FFXF076
mRFP	584	607	1400-FFQMAX-RED	TOTO®-1, TO-PRO®-1	514	533	1400-FFXF104-2
mStrawberry	574	596	1400-FFXF174	TOTO®-3, TO-PRO®-3	642	660	1400-FFXF110-2
mTangerine	568	585	1400-FFXF108-2	TO-PRO®-5	748	768	1400-FFXF143-2
mTFP	462	492	1400-FFXF168	Turbo RFP	553	574	1400-FFXF108-2
NBD	465	535	1400-FFXF018-2	TurboYFP	525	538	1400-FFXF104-2
Nile Red	549	628	1400-FFXF103-2	Venus	515	528	1400-FFXF104-2
Orange Green® 488	496	524	1400-FFXF100-2	WW 781	605	639	1400-FFXF045
Orange Green® 500	503	522	1400-FFXF104-2	X-Rhodamine (XRITC)	580	605	1400-FFXF102-2
Orange Green® 514	511	530	1400-FFXF104-2	YFP (Yellow Fluorescent Protein)	513	527	1400-FFXF104-2
Pacific Blue™	410	455	1400-FFXF119-2	YFP/Cy3® FRET	513	570	1400-FFXF167
PBF1	334	504	1400-FFXF004-2	YFP/TRITC FRET	513	580	1400-FFXF166
C-phycoerythrin	620	648	1400-FFXF045	YOYO®-1, YO-PRO®-1	491	509	1400-FFXF100-2
R-phycoerythrin	618	642	1400-FFXF102-2	YOYO®-3, YO-PRO®-3	612	631	1400-FFXF102-2
R-phycoerythrin (PE)	565	575	1400-FFXF108-2	Ypet	517	530	1400-FFXF104-2
Phi YFP	525	537	1400-FFXF104-2	ZsGreen1	493	505	1400-FFXF100-2
PKH26	551	567	1400-FFXF108-2	ZsYellow1	529	539	1400-FFXF104-2



The filter cubes utilized by VanGuard Fluorescence Microscopy Filter Sets are manufactured by Omega Optical (USA).
In addition to VanGuard Microscope Dealers, VanGuard Fluorescence Microscopy Filter Sets can be purchased through Omega Optical.



210 Main Street
Brattleboro, VT 05301
USA
www.omegafilters.com
e-mail: labsales@omegafilters.com

Toll Free: (866) 488-1064
Tel: (802) 254-2690
Fax: (802) 254-3937

ORDERING INFORMATION

VanGuard Fluorescence Filter Holder
Omega Cat. No. XC140

VanGuard Fluorescence Filter Set (EXAMPLE)
VanGuard Cat. No. 1400-FFXF100-2
Omega Cat. No. XF100-2



VEE GEE Scientific, Inc.

13600 NE 126th Place, Suite A • Kirkland, WA 98034
(800) 423-8842 • (425) 823-4518 • Fax: (425) 820-9826
www.veegee.com • e-mail: sales@veegee.com