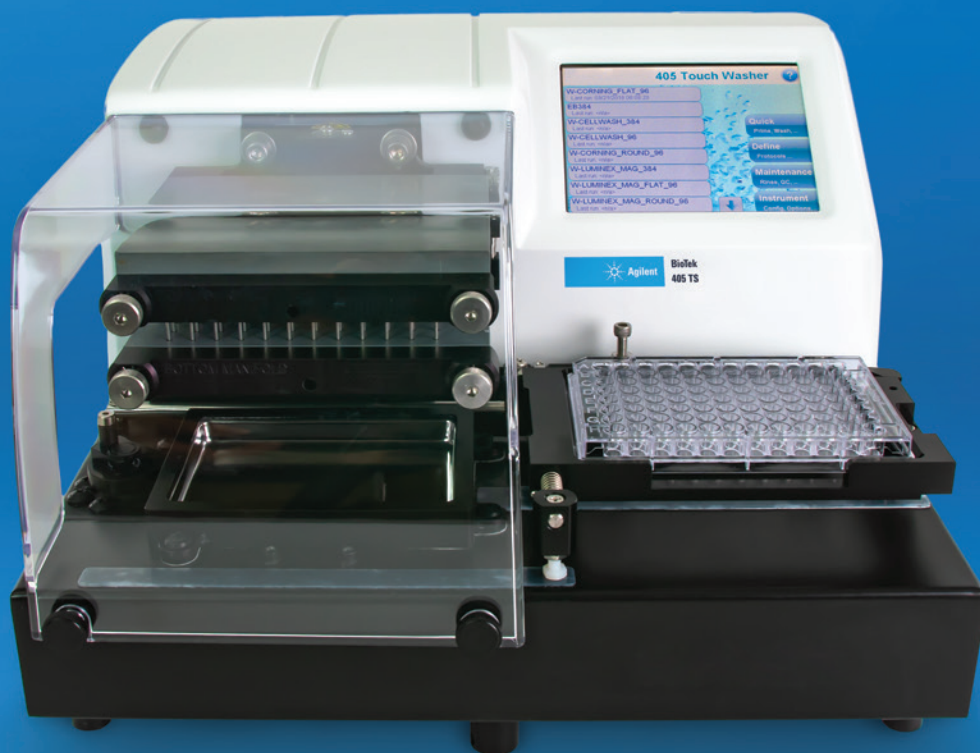


Agilent BioTek 405 TS Microplate Washer

The gold standard of microplate washers

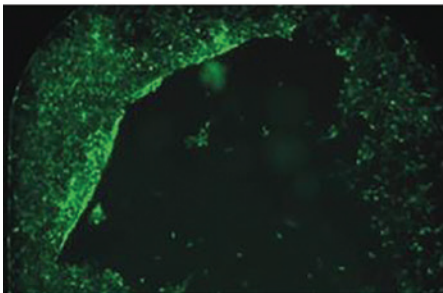


Agilent BioTek 405 TS Microplate Washer

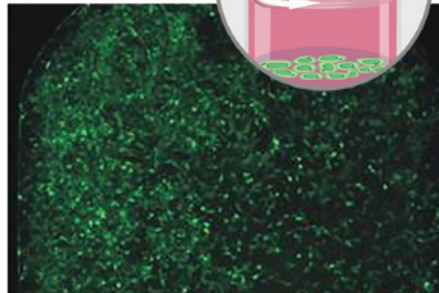


Agilent BioTek 405 TS
microplate washer

The Agilent BioTek 405 TS Washer is the globally recognized standard for microplate washers. It offers unique benefits for effective, efficient washing for many workflows, including cell-based assays, microsphere-based assays and ELISA.



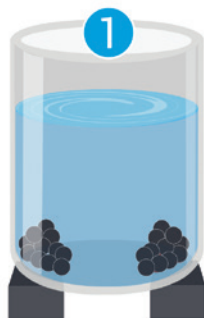
Cells washed with straight tips



Cells washed with angled tips

Cell-friendly design for high quality results

A combination of angled dispense tubes and highly adjustable dispense and aspiration rate settings make the 405 TS the ideal washer for cell-based assays. Gentle flow rates and side-wall dispensing ensure the integrity of cell monolayers.



Magnets



Vacuum

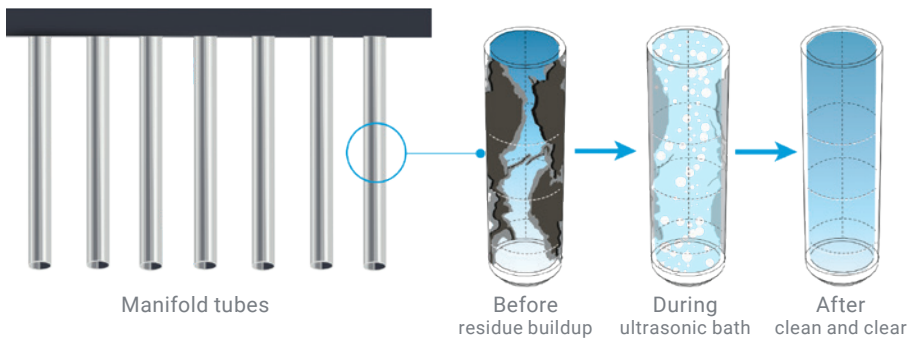
Filter

Automatic magnetic and filtration bead-based assays

Multiplexed bead-based assays are very common, and 405 TS easily accommodates necessary wash steps. Magnet accessories for biomagnetic separation workflows, available in both flat and 4-zone ring designs, ensure high bead recovery **(1)**. A vacuum filtration module is available for polystyrene bead assays **(2)**.

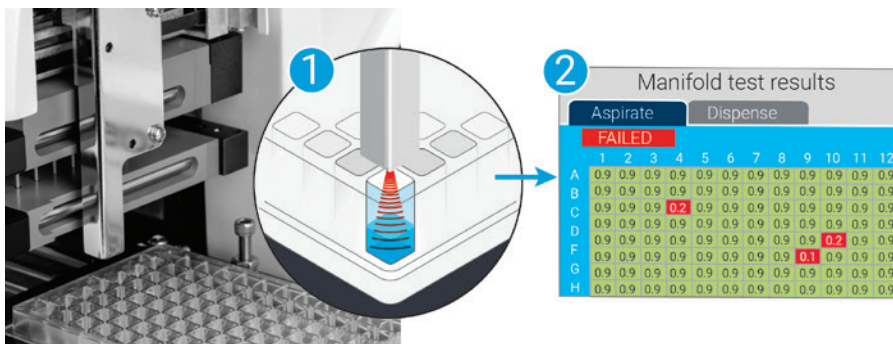
"BioTek has been the gold standard for plate washers in my experience. It is easy to use, maintain and clean and has many options and adjustments to customize for any assay and plate. Field service engineers are very knowledgeable and helpful and know how to help people set the plate washer up and keep it operating optimally."

— SelectScience review



Self-maintaining design with patented ultrasonic bath

Manifold tube clogs are the most common source of failure on plate washers. The built-in Ultrasonic Advantage allows the instrument to clean buildup in the manifold tube automatically, without removing it from the instrument.

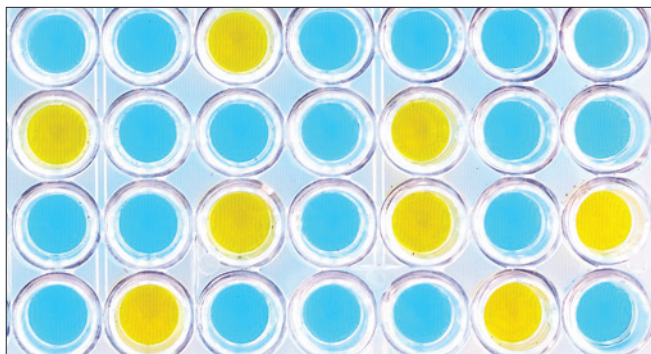


Hands-off self-testing Verify technology

The Verify technology option eliminates tedious manual procedures by using an ultrasonic probe (1) to check dispense and aspirate performance. Test results are automatically displayed (2) and indicate tubes that may require additional cleaning.

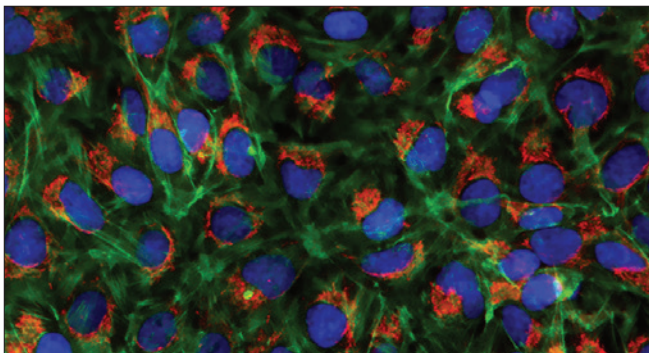
Applications

ELISA



Wash steps are critical to many ELISA processes, including colorimetric, fluorometric and luminometric methods. 405 TS easily accomplishes automated plate washing for accuracy and efficiency.

Cell-based assays



Minimal disruption of cells during wash keeps the monolayer intact for superior image capture or multimode detection.

MSD assay automation



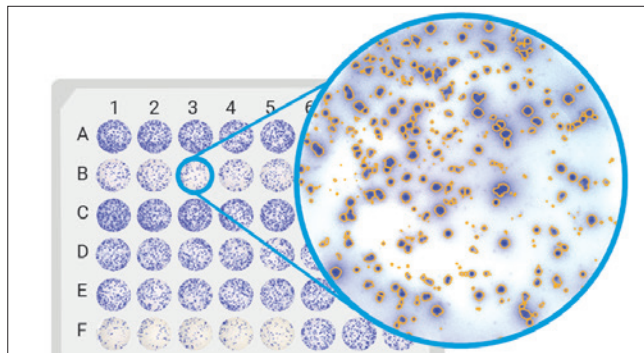
Multiplex assays such as Mesoscale Discovery's "Plex" assays, require effective washing...easily accomplished with the 405 TS.

Bead-based multiplex assays



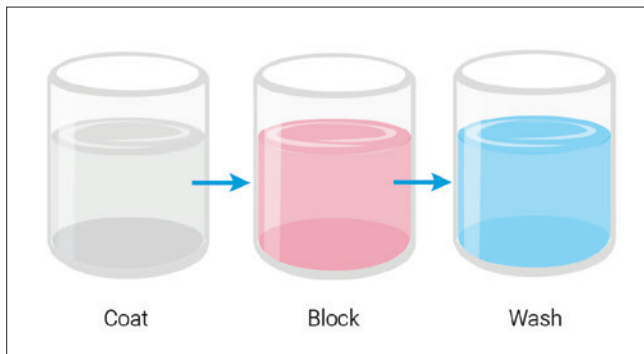
Flat- or ring-style magnet plates optimize bead retention during wash, and the vacuum filtration system enables efficient filtration-to-waste processes.

ELISpot assays



The 405 TS automates the wash steps required of ELISpot assays, in which cell secretions are made visible via colorimetric reactions and can be imaged in Agilent BioTek Cytation 7 imagers.

ELISA plate coating



The adjustable XYZ positioning allows precise control of fluid levels for automated ELISA plate coating and manufacturing processes.

Related instruments

The 405 TS, used in conjunction with several other Agilent BioTek instruments, enhances and automates many workflows.



Agilent BioTek Epoch 2 microplate spectrophotometer

Ultimate assay flexibility is offered with filter-free wavelength selection from 200 nm to 999 nm in the Epoch 2. The 405 TS partners with Epoch 2 for many wash-read workflows.



Agilent BioTek Cytation cell imaging multimode reader

Cytation cell imaging multimode reader, integrated with a 405 TS and Agilent BioTek BioSpa, creates a live cell imaging system for up to eight plates at a time.



Agilent BioTek BioStack microplate stacker

Automate routine microplate washing processes with the compact BioStack microplate stacker. BioStack 4 offers patented plate de-lidding and re-lidding for sensitive cell-based workflows, and all BioStacks are available with 10-, 30- or 50-plate capacity stacking columns.



Agilent BioTek BioSpa 8 automated incubator

BioSpa 8 provides environmental controls and labware handling. Integrated to a 405 TS and a BioTek reader or imager, it facilitates workflows from ELISA to long term live cell kinetic imaging in up to eight microplates.



405 Touch Wash

W-CORNING_FLAT_96	Last run: 03/20/2018 09:00:00
EB384	Last run: 03/20/2018 09:00:00
W-CELLWASH_384	Last run: 03/20/2018 09:00:00
W-CELLWASH_96	Last run: 03/20/2018 09:00:00
W-CORNING_ROUND_96	Last run: 03/20/2018 09:00:00
W-LUMINEX_MAG_384	Last run: 03/20/2018 09:00:00
W-LUMINEX_MAG_FLAT_96	Last run: 03/20/2018 09:00:00
W-LUMINEX_MAG_ROUND_96	Last run: 03/20/2018 09:00:00

Quick
Prime, Wash
Define
Protocols
Maintenance
Rinse, QC
Instrument
Config, Options

Agilent BioTek
405 TS



Technical Details



General	
Microplate types	96- and 384-well Low profile and standard height Solid and filter bottom (option)
Onboard software	Create, edit or run multiple protocols
Software (computer control)	LHC2 software LHC2 Secure for 21 CFR Part 11 compliance (option) SiLA Compliant driver (option)
Bead-based assay support	Biomagnetic separation, vacuum filtration (optional)
Shaking and soaking	Programmable up to 60 minutes
Maintenance and safety	Ultrasonic Advantage (option) Verify clog detection (option) Waste level detection Fluid flow detection
Automation	BioStack, BioSpa 8 and third party automation compatible
Washing	
Manifold types	Manifolds available for 96- and 384-well washing, 384-well only and 96-well only washing
Volume range	25-3,000 µL/well (192-pin manifold) 50-3,000 µL/well (96-pin manifold)
Buffer/reagent selection	Auto switching (internal) for up to four buffers (option)
Supply bottle	4 L or 10 L (optional)
Waste bottles	4 L, 1 L and 20 L waste bottles available. Direct drain option available.
Dispense precision	<3% CV: 300 µL/well (96-well washing) <4% CV: 80 µL/well (384-well washing)
Residual volume	≤ 2 µL/well (96- & 384-well plates, using 96-tube manifold for 96 wells @300 µL; 192-tube for 384 wells@100 µL)
Wash speed	96-wells, 300 µL/well, 3 cycles; <30 seconds 384-wells, 100 µL/well, 3 cycles: <80 seconds
Flow rates	Adjustable rates, high flow to low flow Optimized rates for cell assays
Sterilization	Chemical
Vacuum filtration	Selectable, range from -38 mmHg to -506 mmHg Vacuum filtration time range: 5 to 999 seconds

Learn more and buy online:

www.agilent.com/lifesciences/biotek

Get answers to your technical questions and
access resources in the Agilent Community:

community.agilent.com

U.S. and Canada

1-800-227-9770

agilent_inquiries@agilent.com

Europe

info_agilent@agilent.com

Asia Pacific

inquiry_lsca@agilent.com

For Research Use Only. Not for use in diagnostic procedures.
RA44435.3036657407

This information is subject to change without notice.

© Agilent Technologies, Inc. 2021
Published in the USA, October 13, 2021
5994-2400EN

