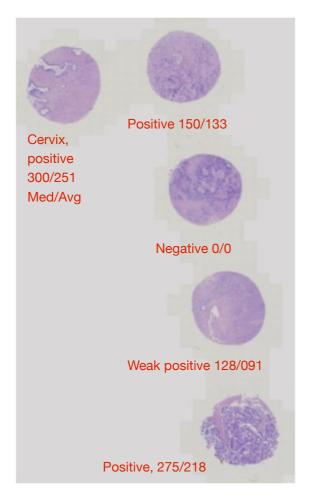
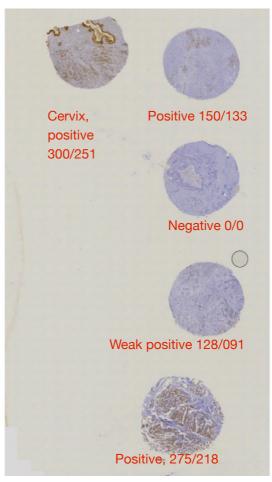


Progesteron receptor (PR)





HE staining in scanner view. The scores are median/average for each.

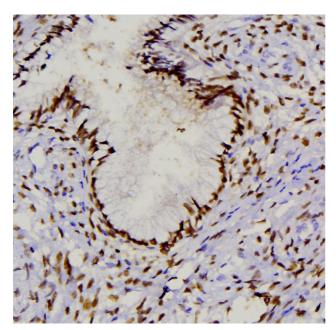
PSA immunostaining, scanner view

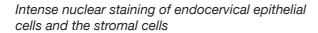
Provided sections in this run.

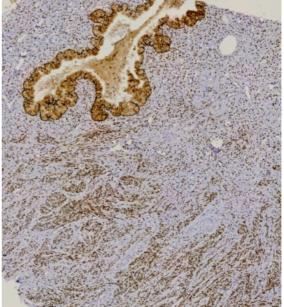
Tissue No. 4 is the most important tissue section in the theme. While cervix serves as a good positive control, many participants failed in the weak intensity case number 4. Since it is clinically most crucial to identify hormone receptor positivity, it would be imperative to have a right protocol setting that would identify the weakest of the lot.

General observations in Run 16

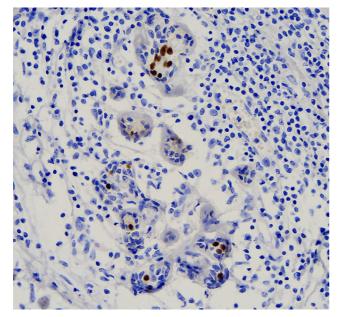


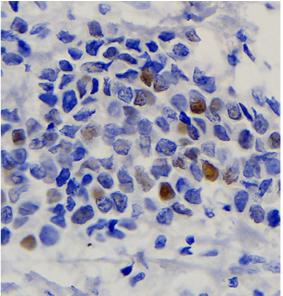






Clone pgr636 is likely to produce nonspecific cytoplasmic staining of endocervical epithelial cells

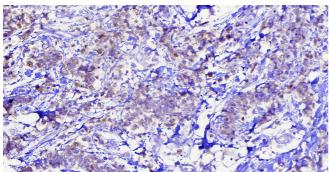


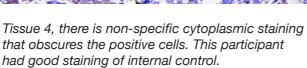


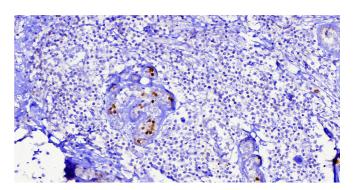
Optimum staining of Tissue 4. The internal control must be stained. The tumour cells take up the entire range of staining in a particular focus.

General observations in Run 16

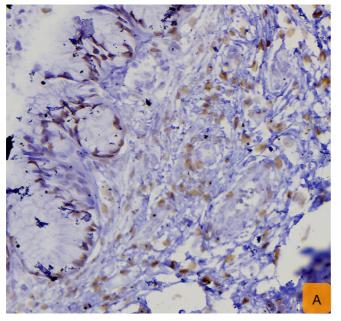


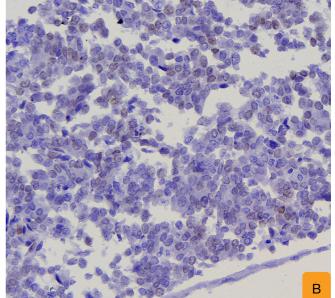






Tissue 4, good internal control in the same participant.





Participant with inadequate protocol shows weak staining of cervix (A). This invariably produces weak or negative staining of positive cases (B, case 5).



Protocol used by the top 3 in this run

Variable	1	2	3
Technique	Automated, Ventana Medical System Benchmark XT Roche	Manual	manual
Clone	Monoclonal , Pg R 636	EP 2 rabbit monoclonal	Rabbit polyclonal EP2
Vendor	Ventana 790-4396	Pathnsitu Biotechnology (PRO 68)	Pathnsitu CAT#PRO68
Format	RTU	RTU	RTU
Batch/Year	F42791	R07068CA, August 2020	R08068OA 11/21
Expiry	05-2017(revalidated)	April 2022	05/23
Dewaxing temperature	Automated dewaxing using Exprep (75 degree celcius) for 4 min	60 degree Celcius	62 Degree centigrade
Retrieval	Automated heat retrieval (HIER)	HIER	HIER
Enzyme	NA	NA	N/A
HIER	Automated Ventana Heat Retrieval System	Company system (Multiepitope retrieval system) MERS, Patnsitu Biotechnology	Pressure cooker Pathnsitu(MERS)
Peak T and Time	Automated cell conditioning 100 degree celcius for 60 min	110 degree Celcius for 15 minutes	103 Degree centigrade 10 minutes
Peak Pressure and Time	NA	15 lbps for 15 minutes	10-11Psi
Retrieval Buffer	Automated company provided Ventana Roche	Tris EDTA Buffer (Company provided)	n/a
рН	Alkaline pH(Ventana)	9	9.0
Blocking	Automated Ventana System	Polyexcel H2O2 for 10 minutes	Hydrogen peroxide.
Wash sol	Automated Ventana System	Tris buffer saline with tween twenty	Tris buffered saline without saponifying agent
Dilution of RTU	No	No	no

General observations in Run 16



Variable	1	2	3
variable	1		S
Dilution of conc	NA	NA	N/A
Diluent	NA	NA	N/A
Inc time of Primary	32 min	1 hour	60 Minutes
Detection	Automated Ventana	A polymer-based system using DAB	Polymer based system
Cat No	Ultraview Universal DAB detection kit, REF760- 500, LOT H07639, MFG DATE: 8.7.2021, EXP: 14.4.2023	DAB, Pathnsitu biotechnologies, 108013UAI, February 2020, February 2023	Dako envision 41330042 - 31/05/22
Inc time of Sec	Automated	18 minutes	30 minutes
Chro-substrate	Automated	5 minutes	10 minutes
Post-treatment	Automated	No	no
Counterstain	Automated (Hematoxylin 2)	Hematoxylin	Hematoxylin