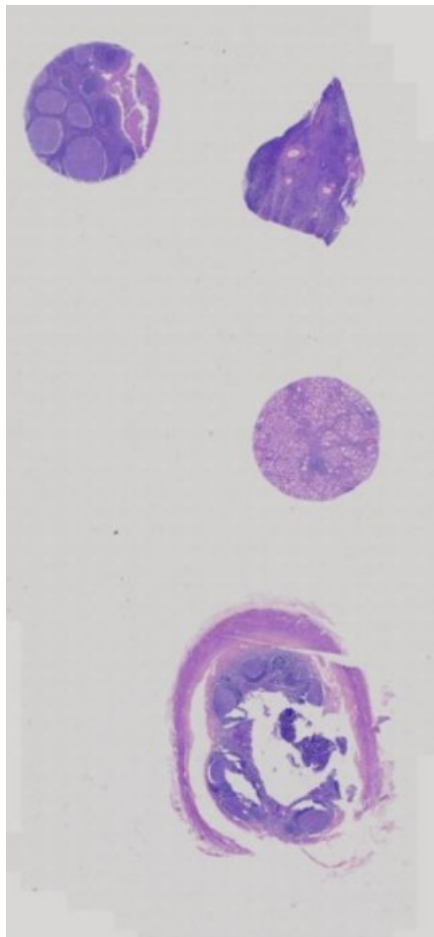


CD10



HE staining in scanner view.



Immunostaining, scanner view

Provided sections in this run:

TISSUE	PROPORTION	INTENSITY
Tonsil	Intense staining of practically all the germinal center cells. The paracortical cells do not stain. Morphology should be well preserved.	Intense
Follicular Lymphoma	An at least weak to moderate staining reaction of the vast majority of neoplastic cells of the follicular lymphoma.	Intense
Kidney	A moderate to strong, predominantly membranous but also cytoplasmic staining reaction of virtually all the epithelial cells in the renal proximal tubules and the parietal layer of the Bowman's capsule.	Intense
Appendix	Intense membranous and cytoplasmic staining of intraepithelial lymphocytes, lymphocytes in the interfollicular region and few T cells in the germinal center.	Intense



Performance characteristic of the group:

N	34
MEDIAN OVERALL SCORE	54
AVERAGE OVERALL SCORE	41

Criteria for assessment:

	Optimum	Good	Borderline	Poor
Overall score	>59	55-59	49-54	<49

Break up of results

Result	Participants
Optimum	22
Good	8
Borderline	0
Poor	4
Section not submitted	10

Break up of results based on technique

Result Technique	Optimum	Good	Borderline	Poor	Total
Manual	16	3	0	0	19
Automated	0	1	0	1	2
Automated Ventana Bench Mark XT	3	3	0	0	6
Automated Ventana Benchmark Ultra	0	0	0	1	1
Automated, Ventana Benchmark GX	0	1	0	1	2
Automated, Ventana Medical systems, Inc., Roche Diagnostics	1	0	0	1	2
NA	2	0	0	0	2



Clones used in the run by participants

Clone	Participants
56C6	14
MMEP	1
NA	4
NEPP	6
SP67	7
MD182	1
GM003	1

Break up of results based on the clones used

Clone	Result	Optimum	Good	Borderline	Poor	Section not submitted	Total
56C6		10	3	0	1	0	14
MMEP		0	1	0	0	0	1
NA		4	0	0	0	0	4
NEPP		5	0	0	1	0	6
SP67		2	3	0	2	0	7
MD182		0	0	0	0	1	1
GM003		1	0	0	0	0	1



Break up of results based on the vendors

Vendor	Result	Optimum	Good	Borderline	Poor	Total
BIOCARE MEDICAL , CM129AKBKCK		0	1	0	0	1
BIOCARE MEDICALS		1	0	0	0	1
BIOCARE PM129AA		1	0	0	0	1
BiogeneX AM451-5M		1	0	0	0	1
Cell Marque Cat 110M-16-RUO		1	0	0	0	1
Dako, IS648		1	0	0	0	1
MASTER DIAGNOSTIC, 002022QD		3	0	0	0	3
Master Diagnostica		0	1	0	0	1
Master Diagnostica; MAD002022QDR-7		1	0	0	0	1
Master diagnostics, 002022QD-R-3		0	0	0	1	1
MEDAYSIS		0	0	0	0	0
NA		2	0	0	0	2
Pathnsitu		2	0	0	1	3
PathnSitu MM1245		1	1	0	0	2
PathnSitu, catalogue number: PM150		1	0	0	0	1
PathnSitu; MR1288		3	0	0	0	3
Quartette		2	0	0	0	2
Ventana		0	1	0	1	2
Ventana 7904506		2	2	0	1	5
Ventana, CKM008		0	1	0	0	1
Zeta Corporation, 20012205B		0	1	0	0	1



Break up of results based on format

Result Format	Optimum	Good	Borderline	Poor	Section not submitted	Total
Concentrated.	18	7	0	4	1	30
RTU	2	1	0	0	0	3
NA	2	0	0	0	0	2

Break up of results based on temperature of dewaxing

Result Dewax Minutes	Optimum	Good	Borderline	Poor	Section not submitted	Total
37	1	0	0	0	0	1
>75	0	0	0	0	0	0
55-60	6	1	0	1	0	8
61-65	7	2	0	0	0	9
66-70	2	0	0	0	1	3
71-75	2	4	0	2	0	8
NA	2	1	0	0	0	3
RT	1	0	0	0	0	1



Break up of results based on pH of retrieval buffer

Result pH	Optimum	Good	Borderline	Poor	Section not submitted	Total
6.0-6.9	3	1	0	0	0	4
7.0-8.0	2	2	0	0	0	4
8.1-9.0	14	4	0	4	1	23
>9.0	0	0	0	0	0	0
NA	2	1	0	0	0	3

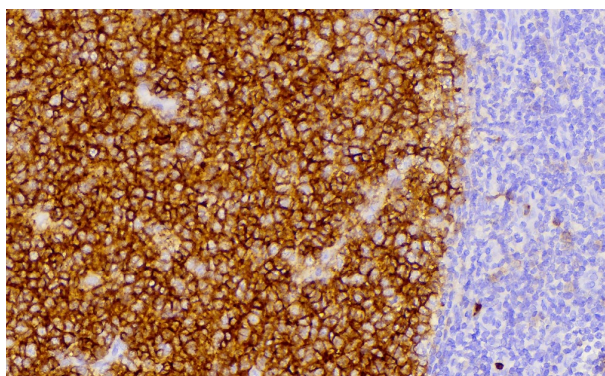
Break up of results based on incubation time of primary antibody

Result Time in minutes	Optimum	Good	Borderline	Poor	Section not submitted	Total
<15	0	0	0	0	0	0
15-30	7	0	0	0	0	7
31-45	2	4	0	3	0	9
46-60	11	4	0	0	1	16
NA	2	1	0	0	0	3

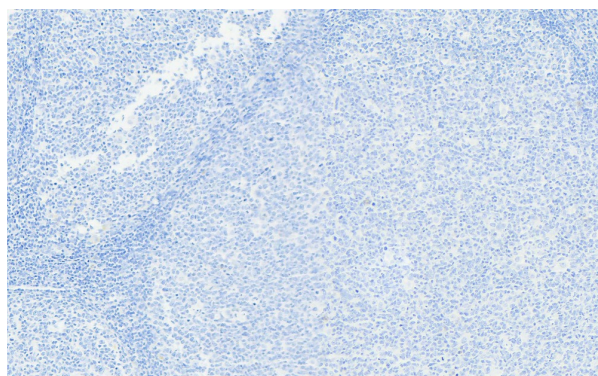
General observations in Run 17



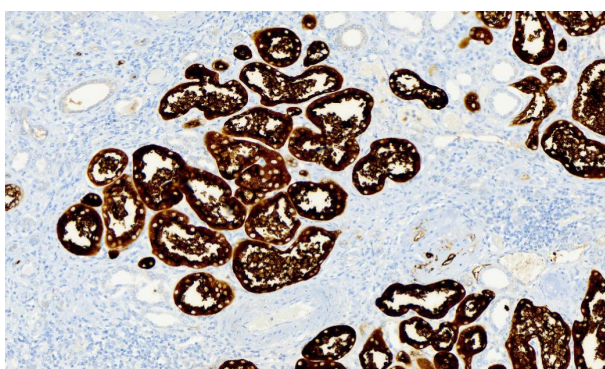
VARIABLE	1	2	3
Technique	Manual Technique	Mnual	Automated Ventana benchmark XT
Clone	56C6	56C6	56C6
Vendor	Master diagnostic MAD-002022QD-B-3	Dako, IS648	Master Diagnostica; MAD002022QDR-7
Format	RTU	RTU	RTU
Batch/Year	20220036S	20047910	20220038S, 2022
Expiry	09/2023	May-23	31-10-2023
Dewaxing temperature	65 degree	65 degree celsius	room temp in milk
Retrieval	HIER EDTA Buffer pH 9.0	HIER	HIER
Enzyme	---	-	Not applicable
HIER	Micro wave	Pressure cooker	Ventana CC1 mild
Peak T and Time	98 degree 20 minutes	300 W, 15 min	As per Ventana automated protocol
Peak Pressure and Time	98 degree 20 minutes	-	As per Ventana automated protocol
Retrieval Buffer	In house	Envision Flex Target Retrieval solution High pH Dako	Ventana CC1 mild
pH	EDTA Buffer pH 9.0	pH 9.0	8.4
Blocking	3 % Hydrogen peroxide with methanol 15 minutes	Envision Flex Peroxidase-blocking reagent Dako 10	Ventana ultraview inhibitor
Wash sol	TBST buffer pH 7.4	Envision Flex Wash Buffer, Dako (Tris buffered saline)	EZ prep
Dilution of RTU	---	Yes, 20x	No
Dilution of conc	---	-	NA
Diluent	0	-	NA
Inc time of Primary	30 minutes	1 hr	1 hour
Detection	Polymer based system	Polymer based system	Ventana ultraview kit (760-500)
Cat No	Master Polymer plus detection system (Peroxidase)	Envision Flex / HRP, Dako, Batch no. 41293165_K8000	Ventana ultraview kit (760-500). Ventana cat no
Inc time of Sec	30 minutes	30 min	30 min
Chro-substrate	4-6 minutes	10 min	7 min
Post-treatment	---	No	No
Counterstain	Hematoxylin	Haematoxylin	Hematoxylin



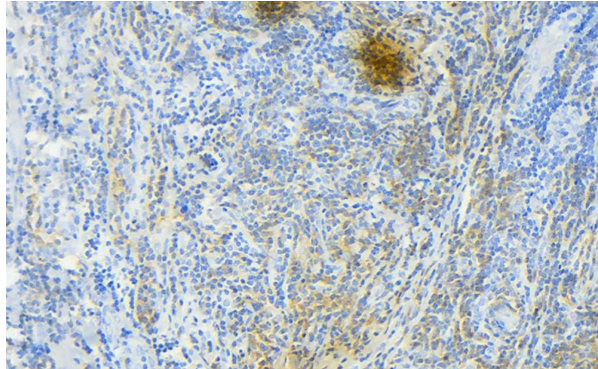
Optimum staining of germinal center B cells of Tonsil. The cells outside the germinal center are unstained. Note the sharp boundary of staining and preserved morphology.



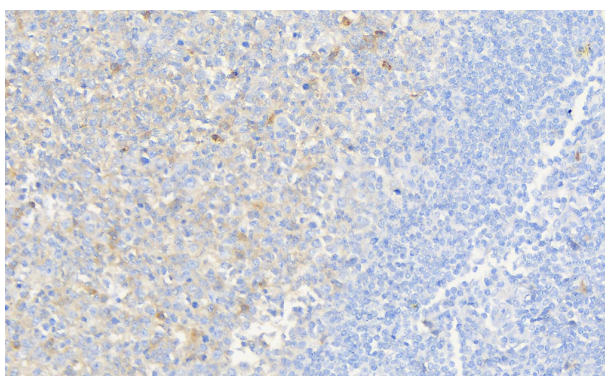
Suboptimal staining due to unsuccessful antibody and less than 15 minutes of incubation time of primary antibody. The germinal center cells are completely unstained. Compared with the optimal staining.



Optimum staining of renal tubules. However, it is too intense that blurs the cytological details. Post-staining step can be avoided to achieve optimum cellular details.



Same case as the above that shows weak intensity staining. Note the blotches of stain that is generally due to inappropriate HIER and poor wash cycles.



Suboptimal staining in a participant using unsuccessful antibody clone. Note the weak staining of germinal center cells.