#### KEY:

Red text: Changes to be made to DB ontology that were unable to be made during last ontology update (for Editorial Office Use Only)

### TS24 urinary and reproductive systems (16dpc)

EMAP:25789	mouse
EMAP:8440	- organ system
EMAP:8441	- visceral organ
EMAP: 9526	- urinary system
EMAP: 9534	mesentery
EMAP:29614	rest of mesentery
EMAP: 9535	urogenital mesentery
EMAP: 9536	metanephros (syn: kidney)
EMAP: 9547	renal capsule
EMAP:27725	nephrogenic zone
EMAP:27732	- nephrogenic interstitium (syn: peripheral blastema)
EMAP:27739	- cap mesenchyme (syn: condensed mesenchyme)
EMAP:27746	pretubular aggregate (syn: pretubular condensate)
EMAP:27753	- ureteric tip (syn: ureteric ampulla)
EMAP:31049	Lureteric tree terminal branch excluding tip itself
EMAP: 9546	renal cortex
EMAP:27832	renal vesicle (syn: epithelial vesicle; stage I nephron)
EMAP:31696	- renal connecting segment of renal vesicle
EMAP:31727	- distal renal vesicle
EMAP:31721	L proximal renal vesicle
EMAP:27838	
EMAP:27844	upper limb of comma-shaped body (syn: distal limb of comma-shaped body)
EMAP:27850	lower limb of comma-shaped body (syn: proximal limb of comma-shaped body)
EMAP:31713	L renal connecting segment of comma-shaped body
EMAP:27856	- s-shaped body (syn: stage II nephron)
EMAP: 27868	renal connecting tubule of s-shaped body
EMAP: 27874	distal segment of s-shaped body (syn: upper limb of s-shaped body)
EMAP: 27880	medial segment of s-shaped body (syn: mid-portion of s-shaped body)
EMAP: 27886	L proximal segment of s-shaped body (syn: lower limb of s-shaped body)
EMAP: 27898	- visceral epithelium
EMAP:27904 EMAP:27910	
EMAP: 27910 EMAP: 27928	associated interstitium of renal corpuscle
EMAP: 27922	parietal epithelium
EMAP: 27940	
EMAP: 27934	presumptive mesangium
EMAP:27916	visceral epithelium (syn: podocyte layer)
EMAP:27946	maturing renal corpuscle (syn: renal corpuscle of Stage IV nephron)
EMAP:27952	maturing glomerular tuft (syn: maturing glomerulus)
EMAP:27958	glomerular capillary system of maturing glomerular tuft
EMAP:27964	glomerular mesangium
EMAP:27970	- visceral epithelium (syn: podocyte layer)
EMAP:30968	glomerular basement membrane
EMAP:27976	Bowman's capsule (syn: glomerular capsule)
EMAP:27982	parietal epithelium
EMAP:27988	urinary space of renal corpuscle (syn: Bowman's space)
EMAP:30034	
EMAP:27994	L juxtaglomerular arteriole
EMAP: 9556	cortical renal tubule
EMAP:28006	- early proximal tubule
EMAP:31710	early proximal tubule of capillary loop nephron (syn: anlage of proximal tubule)
EMAP:31704	Learly proximal tubule of maturing nephron
EMAP: 31284	- anlage of loop of Henle (syn: primitive loop of Henle)
EMAP: 28010	- early distal tubule
EMAP: 31612	- early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
EMAP: 31618	Learly distal tubule of maturing nephron
EMAP: 28014	L renal connecting tubule
EMAP:31624	

EMAP:31630	
EMAP:28133	- cortical collecting duct
EMAP:28139	renal cortical interstitium (syn: cortical stroma)
EMAP:31291	renal cortical fibroblasts
EMAP:31299	resident macrophages of the cortex (syn: renal monocytes of the cortex)
EMAP:31307	L rest of renal cortical interstitium
EMAP:28144	renal cortical vasculature
EMAP:28149	- renal cortical arterial system
EMAP:28154	renal cortical venous system
EMAP:30039	L renal cortical capillary
EMAP:31314	- renal cortical lymphatics
EMAP:31321	L renal cortical nerves
EMAP:28044	renal medulla
EMAP:30865	
EMAP:31020	straight limb
EMAP:31024	bend (syn: U-turn)
EMAP:31419	rest of medullary renal tubule
EMAP:28064	- medullary collecting duct
EMAP:9551	renal medullary interstitium (syn: medullary stroma)
EMAP:31328	renal medullary fibroblasts
EMAP:31335	resident macrophages of the medulla (syn: renal monocytes of the medulla)
EMAP:31342	L rest of renal medullary interstitium
EMAP:28159	renal medullary vasculature
EMAP:28164	renal medullary arterial system
EMAP:28169	renal medullary venous system
EMAP:30045	L renal medullary capillary (syn: vasa recta)
EMAP:31349	renal medullary lymphatics
EMAP:31356	L renal medullary nerves
EMAP:9539	
EMAP: 9542	L pelvis
EMAP:28080	- pelvic urothelial lining (syn: pelvic urothelium)
EMAP: 28122	
EMAP: 28086	
EMAP:31362   EMAP:31368	
perihilar interstitiun	
EMAP:31374	L rest of perihilar interstitium
EMAP:28382	- renal artery
EMAP:29978	- endothelial layer of renal artery
EMAP:29999	- endothelium of renal artery
EMAP:30007	smooth muscle layer of renal artery
EMAP:28386	- renal vein
EMAP:29966	- endothelial layer of renal vein
EMAP:30015	- endothelium of renal vein
EMAP:30023	i i i smooth muscle layer of renal vein
EMAP:9544	- ureter
EMAP:28092	- urothelium (syn: transitional epithelium)
EMAP:28592	superficial cellular layer (syn: umbrella cell)
EMAP:28104	L deep cellular layer (syn: basal urothelium)
EMAP:28803	intermediate cell layer
EMAP:28808	L basal cell layer
EMAP:28560	- ureteral mesenchyme
EMAP:28566	subepithelial layer (syn: presumptive lamina propria)
EMAP: 28813	ureteral smooth muscle layer (syn: presumptive ureteral smooth muscle layer)
EMAP: 28816	smooth muscle component
EMAP: 30152	L interstitium (syn: Cajal cell)
EMAP: 28574	
EMAP: 30855	Lureteral vasculature
EMAP:9528   EMAP:28604	
EMAP: 28604   EMAP: 28610	- epithelium of bladder (syn: drothelium)
EMAP: 28610   EMAP: 28616	- epithelium of trigone
EMAP: 28616   EMAP: 30084	Lepithelium of neck
EMAP:30091	lamina propria of the bladder
	I I I I warming brokens or tre progress.

EMAP:30105	lamina propria of fundus
EMAP:30112	
EMAP:30119	L lamina propria of neck
EMAP:28622	
EMAP:28628	
EMAP:28634	muscularis mucosa of trigone
EMAP:30140	L muscularis mucosa of neck
EMAP:28640	- detrusor muscle of bladder
EMAP:28646	detrusor muscle of fundus
EMAP:28652	- detrusor muscle of trigone
EMAP:30126	detrusor muscle of neck
EMAP:28664	- serosa of bladder
EMAP:28670	serosa of fundus
EMAP:28676	
EMAP:30133	serosa of neck
EMAP:28828	
EMAP:28833	
EMAP:28838	
EMAP:30146	Ladventitia of neck
EMAP:28682	
EMAP:31656	L nerve of bladder
EMAP: 9531	- urachus
EMAP: 28750	- urethra of female
EMAP: 28756	pelvic urethra of female
EMAP: 28762	epithelial layer of pelvic urethra of female
EMAP: 28768	mesenchymal layer of pelvic urethra of female
EMAP:31749	mesenchymal layer of dorsal pelvic urethra of female
EMAP: 31746	mesenchymal layer of ventral pelvic urethra of female
EMAP:28774	muscle layer of pelvic urethra of female
EMAP: 31763	muscle layer of dorsal pelvic urethra of female
EMAP:31760	muscle layer of ventral pelvic urethra of female
EMAP: 31796	L nerve of pelvic urethra of female
EMAP:30919	L phallic urethra of female (syn: external urethra of female)
EMAP:30926	urethral plate of female
EMAP:30929	- urethral fold of female
EMAP: 31737	nerve of phallic urethra of female
EMAP: 9589	- urethra of male
EMAP: 9590	- pelvic urethra of male
EMAP:28700	
EMAP:31743	mesenchymal layer of dorsal pelvic urethra of male
EMAP:31734	mesenchymal layer of ventral pelvic urethra of male
EMAP:28712	muscle layer of pelvic urethra of male
EMAP:31755	muscle layer of dorsal pelvic urethra of male
EMAP:31752	L muscle layer of ventral pelvic urethra of male
EMAP:31786	L nerve of pelvic urethra of male
EMAP:28718	phallic urethra of male (syn: external urethra of male)
EMAP:28738	urethral fold of male
EMAP:9593	urethral plate of male
EMAP:31802	nerve of phallic urethra of male
EMAP: 9553	urorectal septum
EMAP:31645	L pelvic ganglion
EMAP:8442	- reproductive system
EMAP:8443	- male reproductive system
EMAP:8444	testis
EMAP:30521	
EMAP:29193	rete testis
EMAP:8449	interstitium of the testis (syn: interstitial tissue)
EMAP:29087	fetal Leydig cell
EMAP:29095	rest of interstitium of the testis (syn: non-specific mesenchyme)
EMAP:29267	tunica vaginalis testis
EMAP:8447	seminiferous cord (syn: seminiferous tubule)
EMAP:29241	Sertoli cell
EMAP:8448	- germ cell of testis

EMAP:29246	L peritubular myoid cell
EMAP:8453	mediastinum testis
EMAP:29119	developing vasculature of the testis
EMAP:29127	
EMAP:29135	L interstitial vessel
EMAP:29263	L tunica albuginea of testis
EMAP:29279	
EMAP:29283	duct of the seminal vesicle
EMAP:29287	L rest of the seminal vesicle
EMAP:29702	- epididymis
EMAP:30586	caput epididymis
EMAP:30612	- epithelium of caput of epididymis
EMAP:30616	muscle layer of caput of epididymis
EMAP:30620	adventitia of caput of epididymis
EMAP:31205	developing vasculature of caput epididymis
EMAP:30582	cauda epididymis
EMAP:30588	- epithelium of cauda of epididymis
EMAP:30592	- muscle layer of cauda of epididymis
EMAP:30596	adventitia of cauda of epididymis
EMAP:31195	developing vasculature of cauda epididymis
EMAP:30584	corpus epididymis
EMAP:30600	- epithelium of corpus epididymis
EMAP:30604	muscle layer of corpus of epididymis
EMAP:30608	- adventitia of corpus of epididymis
EMAP:31200	developing vasculature of corpus epididymis
EMAP:31184	developing vasculature of epididymis
EMAP: 9578	ductus deferens (syn: vas deferens)
EMAP:29275	- epithelium of ductus deferens
EMAP:29271	muscle layer of ductus deferens
EMAP:31190	developing vasculature of ductus deferens
EMAP:12722	appendix epididymis
EMAP:12725	- appendix testis
EMAP:12728	ejaculatory duct
EMAP:12732	gubernaculum (syn: caudal suspensory ligament)
EMAP:9580	mesorchium
EMAP: 9579	- genital tubercle of male (syn: penis anlage)
EMAP: 9582	glans penis
EMAP:30633	glans surface epithelium of male
EMAP:30631	L glans mesenchyme of male
EMAP:30635	L prepuce of male
EMAP:30639	- prepuce surface epithelium of male
EMAP:30641	
EMAP:30637	prepuce mesenchyme of male
EMAP:30432	L scrotal fold
EMAP:30625	scrotal fold mesenchyme of male
EMAP:30628	scrotal fold surface epithelium of male
EMAP: 9557	L female reproductive system
EMAP: 9563	- ovary
EMAP: 9564	- surface epithelium of ovary (syn: coelomic epithelium)
EMAP:9566	mesenchymal stroma of ovary
EMAP:29011	cortical component of mesenchymal stroma
EMAP:31041	rest of cortical component of mesenchymal stroma of ovary
EMAP:31036	L pre-granulosa cell
EMAP:29016	L medullary component of mesenchymal stroma
EMAP: 9567	germ cell of ovary (syn: oogonia; premeiotic germ cell)
EMAP:28975	
EMAP:28970	L meiotic germ cell (syn: oocyte)
EMAP:31030	meiotic oocytes
EMAP:28893	developing vasculature of ovary
EMAP: 9568	rete ovarii of ovary
EMAP: 9562	mesovarium
EMAP: 9565	cystic vesicular appendage
EMAP:12719	suspensory ligament of ovary
EMAP:9558	│

EMAP:9574         EMAP:30674	- oviduct    - epithelial layer of oviduct
EMAP:30673	- muscle layer of oviduct
EMAP:30672	- outer layer of oviduct
EMAP:31215	developing vasculature of oviduct
EMAP:9575	uterine horn (syn: uterus)
EMAP:29031	- epithelium (syn: endometrium)
EMAP:29035	h muscular layer (syn: myometrium)
EMAP:31210	- developing vasculature of uterine horn
EMAP:30676	L outer layer of uterine horn
EMAP:9576	- vagina
EMAP:9594	- lower part of vagina
EMAP:30847	epithelial layer of lower part of vagina
EMAP:29062	muscular layer of lower part of vagina
EMAP:31225	L developing vasculature of lower part of vagina
EMAP:9577	Lupper part of vagina
EMAP:30849	epithelial layer of upper part of vagina
EMAP:30848	h muscular layer of upper part of vagina
EMAP:31220	L developing vasculature of upper part of vagina
EMAP:9559	genital tubercle of female (syn: clitoris anlage)
EMAP:30683	- preputial swelling of female (syn: prepuce of female)
EMAP:30691	surface epithelium of female preputial swelling
EMAP:30687	preputial gland of female
EMAP:30695	L mesenchyme of female preputial swelling
EMAP:30680	L distal genital tubercle of female (syn: glans of female)
EMAP:30681	surface epithelium of distal genital tubercle of female
EMAP:30682	L mesenchyme of distal genital tubercle of female
EMAP:9561	Labial swelling (syn: labia)
EMAP:30439	surface epithelium of labial swelling
EMAP:30434	L mesenchymal layer of labial swelling

#### **TS24 Groups**

'G': Term is a group.

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EMAP:25789
EMAP:8440
                - organ system
                  L visceral organ
EMAP:8441
EMAP: 9526
                     - urinary system
                       - metanephros (syn: kidney)
EMAP:9536
EMAP: 9546
                          Frenal cortex
EMAP: 9556
                            - cortical renal tubule
EMAP:31821 G
                               - cortical renal tubule of capillary loop nephron GROUP
EMAP:31284
                                    anlage of loop of Henle (syn: primitive loop of Henle)
EMAP:31612
                                    early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
EMAP:31710
                                    early proximal tubule of capillary loop nephron (syn: anlage of proximal tubule)
                                 L renal connecting tubule of capillary loop nephron
EMAP:31624
                               cortical renal tubule of maturing nephron GROUP
EMAP:31815 G
EMAP:31618
                                  - early distal tubule of maturing nephron
EMAP:31704
                                    early proximal tubule of maturing nephron
                                    renal connecting tubule of maturing nephron
EMAP:31630
                              early tubule
EMAP:28503 G
EMAP:27832
                               renal vesicle (syn: epithelial vesicle; stage I nephron)
                                 Frenal connecting segment of renal vesicle
EMAP: 31696
                                    distal renal vesicle
EMAP:31727
EMAP:31721
                                 L proximal renal vesicle
EMAP: 27838
                                 comma-shaped body
EMAP: 27844
                                  - upper limb of comma-shaped body (syn: distal limb of comma-shaped body)
EMAP: 27850
                                  |- lower limb of comma-shaped body (syn: proximal limb of comma-shaped body)
EMAP:31713
                                  L renal connecting segment of comma-shaped body
EMAP: 27856
                               L s-shaped body (syn: stage II nephron)
EMAP: 27868
                                    renal connecting tubule of s-shaped body
                                    distal segment of s-shaped body (syn: upper limb of s-shaped body)
EMAP: 27874
EMAP: 27880
                                    medial segment of s-shaped body (syn: mid-portion of s-shaped body)
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EMAP:27886	L proximal segment of s-shaped body (syn: lower limb of s-shaped body)
EMAP:27898	
EMAP:27904	
EMAP:28509 G	
EMAP:27910	capillary loop renal corpuscle (syn: renal corpuscle of the stage III nephron)
EMAP:27928	
EMAP:27922	
EMAP:27940	
EMAP:27934	
EMAP:27916	L visceral epithelium (syn: podocyte layer)
EMAP:9556	L cortical renal tubule
EMAP:28006	
EMAP:31710	early proximal tubule of capillary loop nephron (syn: anlage of proximal
tubule)	
EMAP:31704	L early proximal tubule of maturing nephron
EMAP:31284	
EMAP:28010	early distal tubule
EMAP:31612	early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
EMAP:31618	L early distal tubule of maturing nephron
EMAP:28014	
EMAP:31624	
EMAP:31630	L renal connecting tubule of maturing nephron
EMAP:31821	
EMAP:31284	
EMAP:31612	early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
EMAP:31710	early proximal tubule of capillary loop nephron (syn: anlage of proximal
tubule)	
EMAP:31624	L renal connecting tubule of capillary loop nephron
EMAP:31815	cortical renal tubule of maturing nephron GROUP
EMAP:31618	early distal tubule of maturing nephron
EMAP:31704	early proximal tubule of maturing nephron
EMAP:31630	L renal connecting tubule of maturing nephron
EMAP:28488 G	maturing nephron (syn: stage IV nephron)
EMAP:27946	maturing renal corpuscle (syn: renal corpuscle of Stage IV nephron)
EMAP:27952	maturing glomerular tuft (syn: maturing glomerulus)
EMAP:27958	glomerular capillary system of maturing glomerular tuft
EMAP: 27964	glomerular mesangium
EMAP:27970	visceral epithelium (syn: podocyte layer)
EMAP:30968	L glomerular basement membrane
EMAP: 27976	Bowman's capsule (syn: glomerular capsule)
EMAP: 27982	parietal epithelium
EMAP: 27988	- urinary space of renal corpuscle (syn: Bowman's space)
EMAP: 30034	
EMAP:27994	
EMAD-OFFC I	L juxtaglomerular arteriole
EMAP: 9556	L cortical renal tubule
EMAP:28006	L cortical renal tubule     L early proximal tubule
EMAP:28006 EMAP:31710	L cortical renal tubule
EMAP:28006 EMAP:31710 tubule)	L cortical renal tubule           - early proximal tubule           - early proximal tubule of capillary loop nephron (syn: anlage of proximal
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704	L cortical renal tubule       early proximal tubule         early proximal tubule of capillary loop nephron (syn: anlage of proximal         L early proximal tubule of maturing nephron
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284	cortical renal tubule     early proximal tubule     early proximal tubule of capillary loop nephron (syn: anlage of proximal     early proximal tubule of maturing nephron     anlage of loop of Henle (syn: primitive loop of Henle)
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31821	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31630 EMAP: 31630 EMAP: 31821 EMAP: 31284	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31821 EMAP: 31284 EMAP: 31284	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31821 EMAP: 31284 EMAP: 31284 EMAP: 31612 EMAP: 31612	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31821 EMAP: 31284 EMAP: 31284 EMAP: 31612 EMAP: 31710 tubule)	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31630 EMAP: 31630 EMAP: 31710 tubule) EMAP: 31624	
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31821 EMAP: 31821 EMAP: 31710 tubule) EMAP: 31624 EMAP: 31710 tubule)	cortical renal tubule
EMAP: 28006 EMAP: 31710 tubule) EMAP: 31704 EMAP: 31284 EMAP: 28010 EMAP: 31612 EMAP: 31618 EMAP: 28014 EMAP: 31624 EMAP: 31630 EMAP: 31630 EMAP: 31630 EMAP: 31710 tubule) EMAP: 31624	

EMAP:31630	L renal connecting tubule of maturing nephron
EMAP:28530 G	l li Late tubule
EMAP:27910	capillary loop renal corpuscle (syn: renal corpuscle of the stage III nephron)
EMAP:27928	associated interstitium of renal corpuscle
EMAP:27922	
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EMAP: 27958	
EMAP: 27964	
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EMAP:30968	L glomerular basement membrane
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EMAP:28006	early proximal tubule
EMAP:31710	early proximal tubule of capillary loop nephron (syn: anlage of proximal
tubule)	
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EMAP:31284	anlage of loop of Henle (syn: primitive loop of Henle)
EMAP:28010	early distal tubule
EMAP:31612	early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
EMAP:31618	early distal tubule of maturing nephron
EMAP:28014	renal connecting tubule
EMAP:31624	renal connecting tubule of capillary loop nephron
EMAP:31630	renal connecting tubule of maturing nephron
EMAP:31821	cortical renal tubule of capillary loop nephron GROUP
EMAP:31284	anlage of loop of Henle (syn: primitive loop of Henle)
EMAP:31612	early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
EMAP:31710	early proximal tubule of capillary loop nephron (syn: anlage of proximal
tubule)	
EMAP:31624	L renal connecting tubule of capillary loop nephron
EMAP:31815	cortical renal tubule of maturing nephron GROUP
EMAP:31618	early distal tubule of maturing nephron
EMAP:31704	early proximal tubule of maturing nephron
EMAP:31630	renal connecting tubule of maturing nephron
EMAP:28044	- renal medulla
EMAP:30865	L immature loop of Henle (syn: anlagen of loop of Henle)
EMAP:31417 G	L medullary renal tubule
EMAP:31020	straight limb
EMAP:31024	bend (syn: U-turn)
EMAP:9549 G	early nephron GROUP (syn: early tubule)
EMAP: 9556	- cortical renal tubule
	early proximal tubule
EMAP: 28006	
EMAP: 31710	
EMAP: 31704	
EMAP: 31284	
EMAP:28010	
EMAP: 31612	- early distal tubule of capillary loop nephron (syn: anlage of distal tubule)
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EMAP:31624	L renal connecting tubule of capillary loop nephron
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EMAP:27832	renal vesicle (syn: epithelial vesicle; stage I nephron)
EMAP:31696	
EMAP:31727	
EMAP:31721	proximal renal vesicle
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EMAP:27904	L parietal epithelium
EMAP:27910	capillary loop renal corpuscle (syn: renal corpuscle of the stage III nephron)
EMAP:27928	associated interstitium of renal corpuscle
EMAP: 27920	parietal epithelium
EMAP: 27940	presumptive endothelium of renal corpuscle
EMAP: 27934	
EMAP: 27916	L visceral epithelium (syn: podocyte layer)
EMAP: 27946	maturing renal corpuscle (syn: renal corpuscle of Stage IV nephron)
EMAP:27952	maturing glomerular tuft (syn: maturing glomerulus)
EMAP: 27958	glomerular capillary system of maturing glomerular tuft
EMAP:27964	glomerular mesangium
EMAP:27970	visceral epithelium (syn: podocyte layer)
EMAP:30968	L glomerular basement membrane
EMAP:27976	Bowman's capsule (syn: glomerular capsule)
EMAP:27982	parietal epithelium
EMAP:27988	urinary space of renal corpuscle (syn: Bowman's space)
EMAP:30034	L glomerular mesangium of Bowman's capsule
EMAP:27994	
EMAP:28410 G	- collecting duct (syn: ureteric tree)
EMAP:27753	- ureteric tip (syn: ureteric ampulla)
EMAP:31049	ureteric tree terminal branch excluding tip itself
EMAP:28497	Lureteric trunk
EMAP:28133	- cortical collecting duct
EMAP:28064	L medullary collecting duct
EMAP:28497 G	- ureteric trunk
EMAP:28133	- cortical collecting duct
EMAP:28064	medullary collecting duct
EMAP:28521 G	renal interstitium group
EMAP:27732	nephrogenic interstitium (syn: peripheral blastema)
EMAP:27928	associated interstitium of renal corpuscle
EMAP:27934	presumptive mesangium
EMAP:27964	- glomerular mesangium
EMAP:28139	renal cortical interstitium (syn: cortical stroma)
EMAP:31291	renal cortical fibroblasts
EMAP:31299	resident macrophages of the cortex (syn: renal monocytes of the cortex)
EMAP:31307	rest of renal cortical interstitium
EMAP:9551	renal medullary interstitium (syn: medullary stroma)
EMAP:31328	renal medullary fibroblasts
EMAP:31335	resident macrophages of the medulla (syn: renal monocytes of the medulla)
EMAP:31342	rest of renal medullary interstitium
EMAP:28086	perihilar interstitium
EMAP:31362	perihilar fibroblast
EMAP:31368	resident macrophage of the perihilar interstitium (syn: renal monocytes of the
perihilar interstitium)	1 1 1 1
EMAP: 31374	L rest of perihilar interstitium
EMAP:31471 G	- small blood vessels
EMAP:30039	renal cortical capillary
	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

EMAP:28164	renal medullary arterial system
EMAP:27958	glomerular capillary system of maturing glomerular tuft
EMAP:30045	renal medullary capillary (syn: vasa recta)
EMAP:28169	renal medullary venous system
EMAP:31445 G	L renal capillaries
EMAP:30039	- renal capillaties
EMAP:30045	renal medullary capillary (syn: vasa recta)
EMAP:31772 G	developing vasculature of urinary system GROUP
EMAP:28461	renal vasculature
EMAP:27958	glomerular capillary system of maturing glomerular tuft
EMAP:27994	juxtaglomerular arteriole
EMAP:27940	presumptive endothelium of renal corpuscle
EMAP:28382	renal artery
EMAP:29978	- endothelial layer of renal artery
EMAP:29999	- endothelium of renal artery
EMAP:30007	smooth muscle layer of renal artery
EMAP:28386	
EMAP:29966	- endothelial layer of renal vein
EMAP:30015	endothelium of renal vein
EMAP:30023	L smooth muscle layer of renal vein
EMAP:30025	renal medullary capillary (syn: vasa recta)
	L ureteral vasculature
EMAP:30855	!!!
EMAP:28461 G	- renal vasculature
EMAP:27958	glomerular capillary system of maturing glomerular tuft
EMAP:27994	juxtaglomerular arteriole
EMAP:27940	presumptive endothelium of renal corpuscle
EMAP:28382	renal artery
EMAP:29978	- endothelial layer of renal artery
EMAP:29999	- endothelium of renal artery
EMAP:30007	L smooth muscle layer of renal artery
EMAP:28386	renal vein
EMAP:29966	endothelial layer of renal vein
EMAP:30015	endothelium of renal vein
EMAP:30023	smooth muscle layer of renal vein
EMAP:30045	L renal medullary capillary (syn: vasa recta)
EMAP:31438 G	renal arterial system
EMAP:28382	renal artery
EMAP:29978	endothelial layer of renal artery
EMAP:29999	- endothelium of renal artery
EMAP:30007	L smooth muscle layer of renal artery
EMAP:28164	L renal medullary arterial system
EMAP:31452 G	renal venous system
EMAP:28386	renal vein
EMAP:29966	endothelial layer of renal vein
EMAP:30015	endothelium of renal vein
EMAP:30023	L smooth muscle layer of renal vein
EMAP:28169	L renal medullary venous system
EMAP:31808 G	nerves of urethra GROUP
EMAP:31796	nerve of pelvic urethra of female
EMAP:31786	nerve of pelvic urethra of male
EMAP:31737	- nerve of phallic urethra of female
EMAP:31802	nerve of phallic urethra of male
EMAP:8442	i reproductive system
EMAP:8443	male reproductive system
EMAP:29702	- epididymis
EMAP:31005 G	epithelium of epididymis
EMAP:30612	epithelium of caput of epididymis
EMAP:30600	epithelium of corpus epididymis
EMAP:30588	epithelium of cauda of epididymis
EMAP:31013 G	muscle layer of epididymis
EMAP:30616	muscle layer of caput of epididymis
EMAP:30604	muscle layer of corpus of epididymis
EMAP:30592	L muscle layer of cauda of epididymis
EMAP:31009 G	- adventitia of epididymis
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EMAP: 30620	- adventitia of caput of epididymis
EMAP:30608	- adventitia of corpus of epididymis
EMAP:30596	adventitia of cauda of epididymis
EMAP:31236 G	developing vasculature system of epididymis
EMAP: 31205	developing vasculature of caput epididymis
EMAP:31200	developing vasculature of corpus epididymis
EMAP:31195	developing vasculature of cauda epididymis
EMAP:30979 G	male external genitalia
EMAP: 9579	genital tubercle of male (syn: penis anlage)
EMAP: 9582	- glans penis
EMAP:30633	glans surface epithelium of male
EMAP:30631	glans mesenchyme of male
EMAP:30635	prepuce of male
EMAP:30639	repuce surface epithelium of male
EMAP:30641	reputial gland
EMAP:30637	prepuce mesenchyme of male
EMAP: 30432	scrotal fold
EMAP:30625	scrotal fold mesenchyme of male
EMAP:30628	scrotal fold surface epithelium of male
EMAP: 9557	- female reproductive system
EMAP: 9563	- ovary
EMAP:31059 G	ovigerous cord
EMAP:31030	meiotic oocytes
EMAP:31036	L pre-granulosa cell
EMAP: 9576	vagina
EMAP:30992 G	epithelium of vagina
EMAP:30847	- epithelial layer of lower part of vagina
EMAP: 30849	Lepithelial layer of upper part of vagina
EMAP: 30998 G	- muscular layer of vagina
EMAP: 29062	- muscular layer of lower part of vagina
EMAP: 30848	L muscular layer of upper part of vagina
EMAP:31230 G	developing vasculature of vagina
EMAP: 31225	developing vasculature of lower part of vagina
EMAP:31220 EMAP:30986 G	L developing vasculature of upper part of vagina   L female external genitalia
EMAP: 9559	genital tubercle of female (syn: clitoris anlage)  preputial swelling of female (syn: prepuce of female)
EMAP: 30683	
EMAP: 30691	
EMAP: 30687	
EMAP:30695 EMAP:30680	
	surface epithelium of distal genital tubercle of female
EMAP:30681 EMAP:30682	
EMAP: 30682 EMAP: 9561	Labial swelling (syn: labia)
EMAP: 30439	surface epithelium of labial swelling
EMAP:30439 EMAP:30434	
EMAP:30434 EMAP:31781 G	developing vasculature of reproductive system GROUP
EMAP:31/81 G	developing vasculature of reproductive system GROOP by developing vasculature of ovary
EMAP:28893 EMAP:29119	developing vasculature of ovary  L developing vasculature of the testis
EMAP:29119 EMAP:29127	developing vasculature of the testis
EMAP:2912/ EMAP:29135	Coeloffic vessel
LMAF: 29133	- IIICISUIIAI VESSEI