STOmics

Stereo-CITE RECOMMENDED COMMERCIAL ANTIBODY LIST AND IN-HOUSE VALIDATED INDIVIDUAL ANTIBODY LIST

Using TotalSeq[™]-A Antibody Products from BioLegend

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Note: Please download the latest version of the manual and use it with the corresponding Stereo-seq Transcriptomics kit.

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TotalSeq™ antibody products facilitate protein detection through sequencing and can be integrated into existing Stereo-CITE workflows. Both the TotalSeq-A™ Mouse and Human Universal Cocktails, as well as individual TotalSeq-A™ antibodies from Biolegend, are compatible for use in Stereo-CITE applications.

I. Stereo-CITE Recommended Commercial TotalSeqTM-A Antibody List

A. TotalSeq[™]-A Cocktails

Stereo-CITE solutions enable the use of various TotalSeq[™]-A Antibody Cocktails, ranging from comprehensive panels like the Universal Cocktail, containing >100 antibodies targeting cell surface antigens with corresponding antibody isotype controls, to compact panels such as TotalSeq[™]-A Human TBNK Cocktail, for the identification of principal immune cell subsets.

Mouse				
Product Name	Cat. No.	Description	Information	
TotalSeq™-A Mouse Universal Cocktail, V1.0	199901	119 primary antibodies and 9 isotype controls	 For detailed information, please refer to the <u>official</u> <u>BioLegend product page</u>. You may also <u>download the full barcode list here</u>. 	
Human				
Product Name	Cat. No.	Description	Information	
TotalSeq™-A Human Universal Cocktail, V1.0	399907	154 primary antibodies and 9 isotype controls	 For detailed information, please refer to the <u>official</u> <u>BioLegend product page</u>. You may also <u>download the full barcode list here</u>. 	
TotalSeq™-A Human Universal Cocktail, V2.0	399908	175 primary antibodies and 9 isotype controls	 For detailed information, please refer to the <u>official</u> <u>BioLegend product page</u>. You may also <u>download the full barcode list here</u>. 	
TotalSeq™-A Human TBNK Cocktail	399901	9 primary antibodies for the identification of principal lineage immune cell types	 For detailed information, please refer to the <u>official</u> <u>BioLegend product page</u>. You may also <u>download the full barcode list here</u>. 	
TotalSeq™-A Human Essential Cocktail, V1.0	399913	100 primary antibodies and 9 isotype controls	 For detailed information, please refer to the <u>official BioLegend product page</u>. You may also <u>download the full barcode list here</u>. 	

B. Individual TotalSeq-A[™] antibodies

Stereo-CITE also allows customers to flexibly combine individual TotalSeq-A™ antibodies according to their experimental design. For detailed information of the individual TotalSeq-A™ antibodies from Biolegend, please refer to the <u>Biolegend TotalSeq-A™ antibodies list page</u>.

Note:

The optimal concentrations of all individual TotalSeq-A™ antibodies must be validated by titration prior to combination. For more detailed information, please refer to <u>STUM-TT005 Stereo-CITE Proteo-Transcriptomics Set V1.1 User Manual, Appendix II: Antibody Titration</u>.

II. Stereo-CITE In-house Validated Individual TotalSeq-A Antibody List

Table 1 and Table 2 lists the STOmics in-house validated individual TotalSeg[™]-A antibodies.

Note:

The STOmics R&D team has tested that the 1:250 dilution ratio for the individual antibodies listed in Table 1 and Table 2 is optimal. However, the customer must still validate the concentration for antibodies of interest through antibody titration.

For more information, please refer to STUM-TT005 Stereo-CITE Proteo-Transcriptomics Set V1.1 User Manual, Appendix II: Antibody Titration.

Table 1 Validated Antibody List for Mouse (20 single antibodies)

No.	Catalog Number	Name	Tested tissue	Species-derived Isotype	Compatible secondary antibody (recommended to use in the order: 647-555-488)
1	100773	TotalSeq™-A0002 anti-mouse CD8a Antibody	Mouse thymus	Rat IgG2a, ĸ	Goat anti-Rat IgG (H+L), Alexa Fluor™ Plus 488 [Invitrogen, A48262]; Donkey anti-Rat IgG (H+L), Alexa Fluor™ Plus 555 [Invitrogen, A48270]; Goat anti-Rat IgG (H+L), Alexa Fluor™ 647 [Invitrogen, A21247]
2	100569	TotalSeq™-A0001 anti-mouse CD4 Antibody	Mouse thymus, mouse liver, mouse kidney with septicopyemia	Rat IgG2a, ĸ	
3	103159	TotalSeq™-A0096 anti-mouse CD45 Antibody	Mouse thymus, mouse spleen	Rat IgG2b, K	
4	100637	TotalSeq™-A0111 anti-mouse CD5 Antibody	Mouse thymus, mouse spleen	Rat IgG2a, ĸ	
5	105345	TotalSeq™-A0075 anti-mouse CD90.2 (Thy1.2) Antibody	Mouse thymus, mouse liver	Pat IgG2h K	
6	100251	TotalSeq™-A0182 anti-mouse CD3 Antibody	Mouse thymus, mouse spleen	Rat IgG2b, к	
7	123153	TotalSeq™-A0114 anti-mouse F4/80 Antibody	Mouse thymus, mouse liver, mouse spleen	Rat IgG2a, ĸ	

No.	Catalog Number	Name	Tested tissue	Species-derived Isotype	Compatible secondary antibody (recommended to use in the order: 647-555-488)
8	101265	TotalSeq''"-A0014 anti-mouse/numan	Mouse thymus, mouse liver, mouse kidney with septicopyemia	Rat IgG2b, ĸ	Goat anti-Rat IgG (H+L), Alexa Fluor™ Plus 488 [Invitrogen, A48262]; Donkey anti-Rat IgG (H+L), Alexa -Fluor™ Plus 555 [Invitrogen, A48270]; Goat anti-Rat IgG (H+L), Alexa -Fluor™ 647 [Invitrogen, A21247]
9	102437	TotalSeq™-A0904 anti-mouse CD31 Antibody	Mouse thymus, mouse liver, mouse kidney with septicopyemia	Rat IgG2a, к	
10	137031	Antibody	Mouse thymus, mouse liver, mouse spleen, mouse kidney with septicopyemia	Rat IgG2a	
11	142425	TotalSeq™-A0440 anti-mouse CD169 (Siglec-1) Antibody	Mouse spleen	Rat IgG2a, к	
12	115559	·	Mouse liver, mouse kidney with septicopyemia	Rat IgG2a, к	
13	103263	TotalSeq™-A0103 anti-mouse/human CD45R/B220 Antibody	Mouse spleen, mouse thymus	Rat IgG2a, ĸ	
14	155303	TotalSeq™-A0417 anti-mouse CD163 Antibody	Mouse liver, mouse spleen	Rat IgG2a, к	
15	139325	TotalSeq™-A0202 anti-mouse CD64 (FcγRI) Antibody	Mouse spleen	Mouse IgG1, ĸ	
16	103045	TotalSeq™-A0073 anti-mouse/human CD44 Antibody	Mouse spleen, mouse kidney with septicopyemia	Rat IgG2b, к	
17	102233		Mouse thymus, mouse kidney with septicopyemia	Armenian Hamster IgG	
18	124235	TotalSeq™-A0191 anti-mouse/rat/human CD27 Antibody	Mouse thymus	Armenian Hamster IgG	Goat anti-Armenian Hamster IgG (H+L), Alexa Fluor™ 555 [Invitrogen, A78964]
19	117355	TotalSeq™-A0106 anti-mouse CD11c Antibody	Mouse thymus, mouse liver, mouse kidney with septicopyemia	Armenian Hamster IgG	
20	132811	TotalSeq™-A0561 anti-mouse CD79b (Igβ) Antibody	Mouse thymus, mouse liver	Armenian Hamster IgG	

Table 2 Validated Antibody List for Human (34 single antibodies)

No.	Catalog Number	Name	Tested tissue	Species-derived Isotype	Compatible secondary antibody (recommended to use in the order: 647-555-488)
1	344751	TotalSeq™-A0046 anti-human CD8 Antibody	Human lung cancer, human esophageal cancer lymph node, human tonsil, human esophageal cancerous tumor, human melanoma lymph node, human endometrial cancerous tumor	Mouse IgG1, K	Goat anti-Mouse IgG (H+L), Alexa Fluor™ Plus 488 [Invitrogen, A32723]; Donkey anti-Mouse IgG (H+L), Alexa Fluor™ Plus 555 [Invitrogen, A32773]; Goat anti-Mouse IgG (H+L), Alexa Fluor™ 647 [Invitrogen, A55060]
2	300563	TotalSeq™-A0072 anti-human CD4 Antibody	Human esophageal cancer lymph nodes, human endometrial cancerous tumors, human cervical cancer	Mouse IgG1, K	
3		TotalSeq™-A0034 anti-human CD3 Antibody	Human lung cancer, human esophageal cancer lymph node, human tonsil, human esophageal cancerous tumor, human lymph node, Human colon cancer, human endometrial cancer, human cervical cancer	Mouse IgG1, ĸ	
4	302847	TotalSeq™-A0154 anti-human CD27 Antibody	Human tonsil, human melanoma lymph node, human endometrial cancerous tumor	Mouse IgG1, K	
5		TotalSeq™-A0053 anti-human CD11c Antibody	Human lung cancer, human tonsil, human esophageal cancer, human colon cancer, human melanoma lymph nodes, human endometrial cancer lymph nodes, human cervical cancer	Mouse IgG2b, к	
6	301353	TotalSeq™-A0161 anti-human CD11b Antibody	Human lung cancer, human esophageal cancer lymph node, human tonsil, human esophageal cancerous tumor	Mouse IgG1, K	

No.	Catalog Number	Name	Tested tissue		Compatible secondary antibody (recommended to use in the order: 647-555-488)
7		TotalSeq™-A0124 anti-human CD31 Antibody	Human tonsil, human colon cancer tumor, human melanoma lymph node, human endometrial cancer lymph node, human endometrial cancerous tumor, human cervical cancer	Mouse IgG1, K	
8	346011	TotalSeq™-A0206 anti-human CD169 (Sialoadhesin, Siglec-1) Antibody	Human lymph node	Mouse IgG1, K	
9	302259		Human esophageal cancer lymph nodes, human tonsil, human esophageal cancerous tumors, human colon cancer tumors, human melanoma lymph nodes, human endometrial cancer lymph nodes, human endometrial cancerous tumors, human cervical cancer	Mouse IgG1, K	Goat anti-Mouse IgG (H+L), Alexa Fluor™ Plus 488 [Invitrogen, A32723]; Donkey anti-Mouse IgG (H+L), Alexa Fluor™ Plus 555 [Invitrogen, A32773]; Goat anti-Mouse IgG (H+L), Alexa Fluor™ 647 [Invitrogen, A55060]
10	333635	TotalSeq™-A0358 anti-human CD163 Antibody	Human lung cancer, human tonsil, human colon cancer, human melanoma lymph nodes, human endometrial cancer lymph nodes, human endometrial cancer tumors, human cervical cancer	Mouse IgG1, K	
11	324241	TotalSeq™-A0123 anti-human CD326 (Ep-CAM) Antibody	Human lung cancer, human esophageal cancer lymph nodes, human esophageal cancerous tumors, human colon cancerous tumors, human endometrial cancer lymph nodes, human cervical cancer	Mouse IgG2b, к	

No.	Catalog Number	Name	Tested tissue	Species-derived Isotype	Compatible secondary antibody (recommended to use in the order: 647-555-488)
12	307659	TotalSeq™-A0159 anti-human HLA- DR Antibody	Human lung cancer, human tonsil, human lymph nodes, human colon cancer, human melanoma lymph nodes, human endometrial cancer lymph nodes, human endometrial cancerous tumors, human cervical cancer	Mouse IgG2a, ĸ	Goat anti-Mouse IgG (H+L), Alexa Fluor™ Plus 488 [Invitrogen, A32723]; Donkey anti-Mouse IgG (H+L), Alexa Fluor™ Plus 555 [Invitrogen, A32773]; Goat anti-Mouse IgG (H+L), Alexa Fluor™ 647 [Invitrogen, A55060]
13	329743	TotalSeq™-A0007 anti-human CD274 (B7-H1, PD-L1) Antibody	Human lung cancer, human esophageal cancer lymph nodes, human esophageal cancer tumors, human colon cancer tumors	Mouse IgG2b, к	
14	302359	TotalSeq™-A0100 anti-human CD20 Antibody	Human lung cancer, human esophageal cancer lymph nodes		
15	329955	TotalSeq™-A0088 anti-human CD279	Human lung cancer, human esophageal cancer lymph nodes, human tonsil, human melanoma lymph nodes, human endometrial cancer tumors	Mouse IgG1, K	
16	301855	TotalSeq™-A0081 anti-human CD14 Antibody	Human lung cancer	Mouse IgG2a, K	
17	362557	TotalSeq™-A0047 anti-human CD56 (NCAM) Antibody	Human esophageal cancer lymph nodes, human esophageal cancer tumors	Mouse IgG1, K	
18	324125	TotalSeq™-A0135 anti-human CD324 (E-Cadherin) Antibody	Human esophageal cancer lymph nodes	Mouse IgG1, K	
19	392905	TotalSeq™-A0166 anti-human CD66b Antibody	Human tonsil, human melanoma lymph node	Mouse IgG1, K	
20	349521	TotalSeq™-A0373 anti-human CD81 (TAPA-1) Antibody	Human lymph node	Mouse IgG1, K	

No.	Catalog Number	Name	Tested tissue	Species-derived Isotype	Compatible secondary antibody (recommended to use in the order: 647-555-488)
21	333407	TotalSeq™-A0167 anti-human CD35 Antibody	Human lymph node	Mouse IgG1, K	
22	326819	TotalSeq™-A0935 anti-human CD74 Antibody	Human lymph node	Mouse IgG1, ĸ	
23	314541	TotalSeq™-A0136 anti-human IgM Antibody	Human lymph node	Mouse IgG1, к	
24	353745	TotalSeq™-A0140 anti-human CD183 (CXCR3) Antibody	Human lymph node	Mouse IgG1, ĸ	
25	334123	TotalSeq™-A0394 anti-human CD71 Antibody	Human lymph node	Mouse IgG2a, ĸ	Goat anti-Mouse IgG (H+L), Alexa Fluor™ Plus 488 [Invitrogen, A32723]; Donkey anti-Mouse IgG (H+L), Alexa Fluor™ Plus 555 [Invitrogen, A32773];
26	303027	TotalSeq™-A0369 anti-human CD29 Antibody	Human lymph node	Mouse IgG1, ĸ	
27	311137	TotalSeq™-A0180 anti-human CD24 Antibody	Human lymph node	Mouse IgG2a, к	
28	328647	TotalSeq™-A0155 anti-human CD107a (LAMP-1) Antibody	Human lymph node	Mouse IgG1, к	
29	316017	TotalSeq™-A0033 anti-human CD52 Antibody	Human lymph node	Mouse IgG2a, к	Goat anti-Mouse IgG (H+L), Alexa Fluor™ 647 [Invitrogen, A55060]
30	352325	TotalSeq™-A0831 anti-human CD138 (Syndecan-1) Antibody	Human colon cancer, human endometrial cancer lymph nodes, human cervical cancer	Mouse IgG1, K	
31	304157	TotalSeq™-A0063 anti-human CD45RA Antibody	Human colon cancerous tumor, human endometrial cancerous tumor	Mouse IgG2b, к	
32	304255	TotalSeq™-A0087 anti-human CD45RO Antibody	Human colon cancerous tumor, human endometrial cancerous tumor	Mouse IgG2a, ĸ	
33	354915	TotalSeq™-A0181 anti-human CD21 Antibody	Human tonsil, human melanoma lymph node, human endometrial cancer lymph node	Mouse IgG1, ĸ	

No.	Catalog Number	Name	Tested tissue	Species-derived Isotype	Compatible secondary antibody (recommended to use in the order: 647-555-488)
34	1 4 1 4 6 4 4	TotalSeq™-A0070 anti-human/ mouse CD49f Antibody	Human lymph node		Goat anti-Rat IgG (H+L), Alexa Fluor™ 647 [Invitrogen, A21247]