

Multi-Species Kits, Detecting Samples from Different Species

The homology of certain protein in different species is very high, from 95% to 100%.

Due to the characteristics of this kind of protein, while a specific antibody is generated, it can recognize the specific protein from different species.

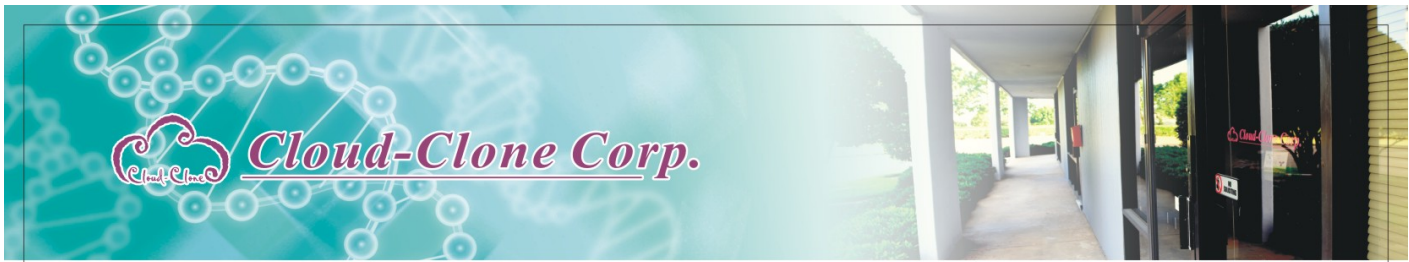
Based on this, Cloud-Clone Corp. develops a new type of ELISA detection kit with antibody which recognizes highly homologous protein. Each of them can detect one specific protein in different samples from different species.



Multi-Species Kits

Catalog No.	Name of ELISA Kit	Applicable Species
SEA289Mi	Histone H4(H4)	Hu/Mu/Ra/Bo/Rb/Po/Ga/Gu/Eq/Ca
SEA285Mi	Histone H3(H3)	Hu/Mu/Ra/Bo/Rb/Po/Ga/Gu/Eq/Ca
SEA356Mi	Histone H2B(H2B)	Hu/Mu/Ra/Bo/Rb/Po/Ga/Gu/Eq/Ca
SEB340Mi	Actin Beta(ACTb)	Hu/Mu/Ra/Bo/Rb/Po/Ga/Gu/Eq
SEB342Mi	Actin Alpha 2, Smooth Muscle (ACTa2)	Hu/Mu/Ra/Bo/Rb/Po/Ga/Gu/Eq
SEJ808Mi	Tyrosine ./Tryptophan 5 Monooxygenase Activation Protein Theta(YWHAq)	Hu/Mu/Ra/Rb/Bo
CEA164Mi	Ubiquitin(Ub)	Hu/Mu/Ra/Rb/Ca/Po/Bo/Eq
SEA594Mi	Cytochrome C, Somatic(CYCS)	Ra/Mu
SED523Mi	Heat Shock Protein 90kDa Alpha A1 (HSP90aA1)	Hu/Mu/Ra/Gu/Po/Ov/Eq

For instance, actin beta(ACTb), which is the main component of cytoskeleton microfilament, is widely distributed in various tissues. The protein is expressed by housekeeping gene, and it is highly conservative, it shares about 100% homology in different mammal species, such as human, mouse, bovine, rat, rabbit, pig, cavpo, horse and chick, etc.



P60709	ACTB_HUMAN	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
P60710	ACTB_MOUSE	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
P60711	ACTB_BOVIN	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
P29751	ACTB_RAT	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
P29751	ACTB_RABBIT	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
Q6QAQ1	ACTB_PIG	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
Q71FK5	ACTB_CAVPO	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
P60708	ACTB_HORSE	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60
P60706	ACTB_CHICK	1	MDDDIAALVVDNCGSMCKACFAGDDAPRAVFPVSVICRFRHQGVVMCGMKDQSVGDEAGS	60

P60709	ACTB_HUMAN	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
P60710	ACTB_MOUSE	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
P60711	ACTB_BOVIN	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
P60711	ACTB_RAT	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
P29751	ACTB_RABBIT	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
Q6QAQ1	ACTB_PIG	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
Q71FK5	ACTB_CAVPO	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
P60708	ACTB_HORSE	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120
P60706	ACTB_CHICK	61	KRCILTLKYPTEHGIIVNDDMEKIWHHTFYNELRVAPFEHPVLLTEAPLNPKANREKMT	120

P60709	ACTB_HUMAN	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
P60710	ACTB_MOUSE	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
P60711	ACTB_BOVIN	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
P60711	ACTB_RAT	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
P29751	ACTB_RABBIT	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
Q6QAQ1	ACTB_PIG	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
Q71FK5	ACTB_CAVPO	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
P60708	ACTB_HORSE	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180
P60706	ACTB_CHICK	121	QIMFETFNTPAMYVAIQAVLSLYASCRITGIVMDSGDCVTHIVPIEGYALPHAILRLDL	180

P60709	ACTB_HUMAN	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
P60710	ACTB_MOUSE	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
P60711	ACTB_BOVIN	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
P60711	ACTB_RAT	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
P29751	ACTB_RABBIT	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
Q6QAQ1	ACTB_PIG	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
Q71FK5	ACTB_CAVPO	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
P60708	ACTB_HORSE	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240
P60706	ACTB_CHICK	181	ACRDLTDYLMKILTERGYSFTTAAEREIVRDIKEKLCYVALDFEQEMATAASSSLEKSY	240

P60709	ACTB_HUMAN	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
P60710	ACTB_MOUSE	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
P60711	ACTB_BOVIN	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
P60711	ACTB_RAT	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
P29751	ACTB_RABBIT	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
Q6QAQ1	ACTB_PIG	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
Q71FK5	ACTB_CAVPO	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
P60708	ACTB_HORSE	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300
P60706	ACTB_CHICK	241	ELPDGQVITIGNERFRCPALFQPSFLGMESCCHEITFNSIMKCDVDIRKDLVANTVLS	300

P60709	ACTB_HUMAN	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
P60710	ACTB_MOUSE	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
P60711	ACTB_BOVIN	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
P60711	ACTB_RAT	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
P29751	ACTB_RABBIT	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
Q6QAQ1	ACTB_PIG	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
Q71FK5	ACTB_CAVPO	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
P60708	ACTB_HORSE	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360
P60706	ACTB_CHICK	301	CGTMYPCIADRMQKEITALAPSTMKIKI IAPPERKYSVVIIGCSILASLSTFGQMWISKQ	360

P60709	ACTB_HUMAN	361	EYDESGPSIVHRKCF	375
P60710	ACTB_MOUSE	361	EYDESGPSIVHRKCF	375
P60711	ACTB_BOVIN	361	EYDESGPSIVHRKCF	375
P60711	ACTB_RAT	361	EYDESGPSIVHRKCF	375
P29751	ACTB_RABBIT	361	EYDESGPSIVHRKCF	375
Q6QAQ1	ACTB_PIG	361	EYDESGPSIVHRKCF	375
Q71FK5	ACTB_CAVPO	361	EYDESGPSIVHRKCF	375
P60708	ACTB_HORSE	361	EYDESGPSIVHRKCF	375
P60706	ACTB_CHICK	361	EYDESGPSIVHRKCF	375

Figure 1. Sequence alignment analysis of ACTb in human, mouse, bovine, rat, rabbit, pig, cavpo, horse and chicken

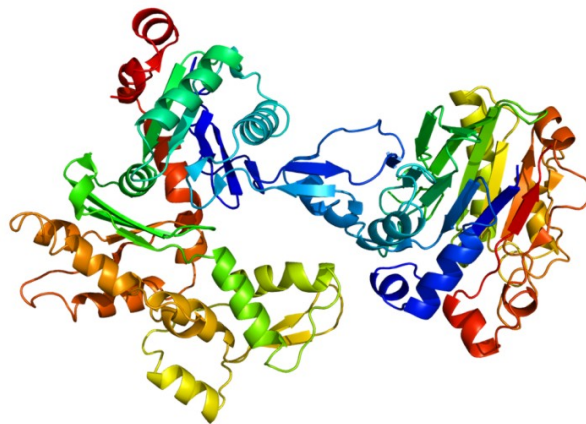


Figure 2. Tertiary structure of ACTb in different species