

Supplementary Material

Table S1: Target genes and primer sequences

Gene Name	Primer sequences (5'→3')	Product length (bp)
β -actin	F: GGCTGTATTCCCCTCCATCG	154
	R: CCAGTTGGTAACAATGCCATGT	
IFN- γ	F: CTGGAGGAACTGGCAAAAGGATGG	167
	R: TCGCCTTGCTGTTGCTGAAGAAG	
TNF- α	F: CGCTCTTCTGTCTACTGAACTTCGG	113
	R: GTGGTTTGTGAGTGTGAGGGTCTG	
IL-17	F: TTAACTCCCTTGCGCAAAA	165
	R: CTTTCCCTCCGCATTGACAC	

**Table S2: Original data for measuring lymphocyte proliferation
using CCK8 method**

Sample Number	Group	Negative	Negative	Sample	Sample	Blank	Stimulation Index
1	BCG	0.453	0.469	0.764	0.711	0.042	0.659904535
2		0.469	0.43	0.752	0.739	0.04	0.722832723
3		0.441	0.432	0.611	0.607	0.04	0.435056747
4		0.4	0.39	0.538	0.545	0.041	0.413841808
5		0.362	0.378	0.605	0.676	0.039	0.817220544
1	BM	0.503	0.478	0.717	0.727	0.049	0.524348811
2		0.426	0.48	0.692	0.674	0.057	0.580808081
3		0.374	0.4	0.529	0.56	0.052	0.470149254
4		0.42	0.422	0.772	0.745	0.036	0.876623377
5		0.348	0.396	0.612	0.654	0.041	0.788519637
1	BE	0.383	0.434	0.838	0.918	0.054	1.324400564
2		0.368	0.366	0.779	0.686	0.042	1.124615385
3		0.363	0.424	0.724	0.774	0.041	1.008510638
4		0.416	0.337	0.723	0.692	0.038	0.977843427
5		0.351	0.377	0.675	0.708	0.04	1.010802469
1		0.381	0.401	0.952	0.874	0.043	1.5
2		0.425	0.425	0.926	0.741	0.042	1.066579634

3	BEM	0.357	0.316	0.748	0.831	0.039	1.522689076
4		0.419	0.348	0.866	0.946	0.038	1.512301013
5		0.341	0.396	0.803	0.977	0.041	1.592366412

Table S3: H&E histology safety scoring or semi-quantitative grading

Evaluation criterion

The four-level classification system		
Level (number)	kind	explain
0	normal	Under the research conditions, taking into account factors such as the animal's age, gender and breed, it is considered that the tissue is normal. However, any changes observed under other conditions can be regarded as abnormal.
1	minimal	The changes that occurred were just slightly beyond the normal range.
2	mild	The lesion can be observed, but it is not yet severe.
3	moderate	The lesion is quite obvious, and it is very likely to be even more severe.
4	severe	The lesion is extremely severe (the lesion has occupied the entire tissue or organ)

Pathological score

Lesion Serial Number	Necrosis	Inflammatory cell infiltration	Hemorrhage	Connective tissue hyperplasia
Heart BCG	0	0	0	0
Heart BM	0	0	0	0
Heart BE	0	0	0	0
Heart BEM	0	0	0	0

Lesion Serial Number	Edema	Congestion	Necrosis	Inflammatory cell infiltration
Liver BCG	3	1	0	0
Liver BM	2	1	0	0
Liver BE	3	0	0	0
Liver BEM	1	1	0	0

Lesion Serial Number	Necrosis	Inflammatory cell infiltration	Bleeding	Congestion
Spleen BCG	0	1	0	0
Spleen BM	0	1	0	0
Spleen BE	1	1	0	0
Spleen BEM	0	1	0	0

Lesion Serial Number	Thickening of the alveolar wall	Inflammatory cell infiltration	Congestion	Bleeding
Lung BCG	0	0	1	0
Lung BM	1	1	1	0
Lung BE	1	1	1	0
Lung BEM	2	2	0	1

Lesion Serial Number	Inflammatory cell infiltration	Edema	Congestion	Connective tissue hyperplasia
Kidney BCG	0	0	0	0
Kidney BM	0	0	0	0
Kidney BE	0	0	1	0
Kidney BEM	0	1	0	0