

# Do I Need IBC Approval?

Agent / Scope (not an inclusive list)	IBC Approval Required -- full committee review at a monthly meeting	IBC Approval Required -- review by IBC Chair on behalf of committee	No IBC Approval Required
<b>Cloning and protein expression in <i>E. coli</i> K-12 derived strains</b> (includes DH5a, Hrf strains, SURE, TOP10, etc.)		X*	
<b>Cloning and protein expression in non K-12 strains of <i>E. coli</i></b> (includes B, BL21, Rosetta, etc.)	X		
<b>Cloning and protein expression in <i>Saccharomyces</i> and <i>Kluyveromyces</i> host-vector systems</b>		X*	
<b>Cloning and protein expression in <u>asporogenic</u> <i>Bacillus subtilis</i> and <i>B. licheniformis</i> host-vector systems</b>		X*	
<b>Cloning and protein expression in <u>spore-forming</u> <i>Bacillus subtilis</i></b>	X		
<b>Cloning and protein expression in bacteria, viruses, fungi, protozoans, etc.</b>	X		
<b>Wild-type bacteria, viruses, fungi and protozoans pathogenic or potentially pathogenic to humans, animals and plants</b>		X*	
<b>Animal cells and cell lines/tissue/blood from uninfected animals*</b> (includes rodent and insect cell lines) *These cells may not be recombinantly modified to retain exempt status.			X
<b>Human and non-human primate cells and cell lines, tissue, blood*</b> (*Provided these materials are not recombinantly modified.)		X*	
<b>Animal and human cells and cell lines, including non-human primate cells and cell lines (transfected)</b>		X*	
<b>Animal and human cells and cell lines, including non-human primate cells and cell lines (transduced with viral vectors)</b>	X*		
<b>Viral vectors</b> (e.g. Lentiviral, retroviral, baculoviral, adenoviral, adeno-associated viral vectors, etc.)	X*		
<b>Plant pathogens</b> (including local, i.e. Texas, isolates)		X*	
<b>Toxins of biological origin</b> (e.g. aflatoxin, pertussis)		X*	
<b>Activities involving gene editing systems</b> (e.g. CRISPR/Cas9, TALENS, etc.)	X**		
<b>Large-scale experiments</b> (greater than 10 liters of culture in a single vessel)	X		
<b>Materials requiring federal transport/import permits</b>		X*	
<b>Experiments involving the introduction of synthetic nucleic acids</b> (e.g. siRNA, microRNA, morpholinos, antisense oligonucleotides) <b>into animals</b> (e.g. rodents, zebrafish, drosophila, pigs, etc.)		X*	
<b>Experiments involving the introduction of recombinant material into animals or plants, including creation or use of genetically modified animals or plants</b>	X*		

\*: some exceptions may apply    \*\*: depends on method of delivery