## **Supplementary Fig. 1**

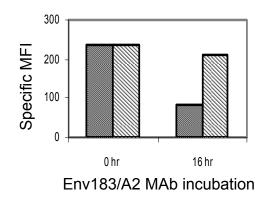
## w6/32 MAb blot:

	-	
Heavy chain	+	+
Light chain	+	+
Env 183-91 peptide	+	-

Quality checking of monomer:

The monomer formed after refolding of MHC heavy chain,  $\beta$ 2 microglobulin and in the presence or absence of Env183-91 peptide was loaded on non-reducing native PAGE and Western transferred. The blot was incubated with conformation-specific w6/32 MAb. W6/32 MAb has been reported to recognize a conformational epitope dependent on the association between heavy chain and  $\beta$ 2-microglobulin.

## Supplementary Fig. 2



- Cell surface only
- Intracellular+surface

Env183/A2 MAb is able to internalize into HepG2-HBV cells: HepG2-HBV (HepG2-117) cells were incubated with Env183/A2 MAb for 1 hr, washed and then incubated at 37°C. At different time points after incubation, cells were collected, either unfixed or fixed and permeablized followed by incubation with anti-mouse secondary antibodies. Cells were analyzed by flow cytometry. In 16 hr, more than 60% antibodies were internalized as evidenced by the specific intracellular staining compared to the surface staining.

## Supplementary Table-1:

Peptide	Sequence
HBc18-27	FLPSDFFPSV
HBe183-91	FLLTRILTI
HBc19-27I	LPSDFFPSI
HBe348-57	GLSPTVWLSV
HBpol455-63	GLSRYVARL
Flu M1-58-66	GILGFVFTL
Flu PA46-54	FMYSDFHFI
EBV LMP2 426-34	CLGGLLTMV
EBV BMLF 259-67	GLCTLVAML
HBX52-60	HLSLRGLPV
Mage 254-62	GLYDGMEHL
Mage3-271-79	FLWGPRALV
SSX 2 (41-49)	KASEKIFYV
NY-ESO-1 (157-65)	SLLMWITQA

Different HLA-A201 binding peptides and their sequences used to address the specificity of TCR-like Mabs are shown.