

Heavy Flavor Averaging Group
Aug. 2006

Compilation of B^+ Baryonic Branching Fractions
All branching fractions are in units of 10^{-6} ; limits are 90% CL

In PDG2006 New since PDG2006 (preliminary) New since PDG2006 (published)

RPP#	Mode	PDG2006 Avg.	BABAR	Belle	CLEO	New Avg.
286	$p\bar{p}\pi^+$	$3.1^{+0.8}_{-0.7}$		$3.06^{+0.73}_{-0.62} \pm 0.37\ddagger$	< 160	$3.06^{+0.82}_{-0.72}$
289	$p\bar{p}K^+$	5.6 ± 1.0	$6.7 \pm 0.5 \pm 0.4\ddagger$	$5.30^{+0.45}_{-0.39} \pm 0.58\ddagger$		6.10 ± 0.48
290	$\Theta^{++}\bar{p}^*$	< 0.091	< 0.09	< 0.091		< 0.09
291	$f_J(2221)K^+^*$	< 0.41		< 0.41		< 0.41
292	$p\bar{\Lambda}(1520)$	< 1.5	< 1.5			< 1.5
294	$p\bar{p}K^{*+}$	$10.3^{+3.6+1.3\ddagger}_{-2.8-1.7\ddagger}$		$10.3^{+3.6+1.3\ddagger}_{-2.8-1.7\ddagger}$		$10.3^{+3.8}_{-3.3}$
295	$p\bar{\Lambda}$	< 0.49		< 0.29	< 1.5	< 0.29
299	$\Lambda\bar{\Lambda}\pi^+$	< 2.8 \ddagger		< 2.8 \ddagger		< 2.8 \ddagger
300	$\Lambda\bar{\Lambda}K^+$	$2.9^{+0.9}_{-0.7} \pm 0.4\ddagger$		$2.9^{+0.9}_{-0.7} \pm 0.4\ddagger$		$2.9^{+1.0}_{-0.8}$

\ddagger Charmonium decays to $p\bar{p}$ have been statistically subtracted.

\ddagger The charmonium mass region has been vetoed. * Product BF - daughter BF taken to be 100%:
 $\Theta(1540)^{++} \rightarrow K^+p$ (pentaquark candidate);

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RPP#	Mode	PDG2006 Avg.	BABAR	Belle	CLEO	New Avg.
266	$p\bar{p}$	< 0.27	< 0.27	< 0.10	< 1.4	< 0.10
268	$p\bar{p}K^0$	$2.1_{-0.4}^{+0.6}$		$2.40_{-0.44}^{+0.64} \pm 0.28\ddagger$		$2.40_{-0.52}^{+0.70}$
269	$\Theta^+ K^0 \dagger$	< 0.23		< 0.23		< 0.23
270	$p\bar{p}K^{*0}$	$< 7.6\ddagger$		$< 7.6\ddagger$		$< 7.6\ddagger$
271	$p\bar{\Lambda}\pi^-$	$2.6 \pm 0.5 \S$	$3.30 \pm 0.53 \pm 0.31$	$3.27_{-0.51}^{+0.62} \pm 0.39$	< 13	$3.29_{-0.44}^{+0.47}$
272	$p\bar{\Lambda}K^-$	< 0.82		< 0.82		< 0.82
273	$p\bar{\Sigma}^0 \pi^-$	< 3.8		< 3.8		< 3.8
274	$\Lambda\bar{\Lambda}$	< 0.69		< 0.32	< 1.2	< 0.32

\S Di-baryon mass is less than $2.85 \text{ GeV}/c^2$; \ddagger The charmonium mass region has been vetoed.

\dagger Product BF - daughter BF taken to be 100%; $\Theta(1540)^+ \rightarrow pK^0$ (pentaquark candidate).

Charmless Baryonic Decay References

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